Clinical Courses

For updates please check our web site:
http://www.urmc.rochester.edu/education/registrar/

Medical School Registrar’s Office (585) 275-4541
601 Elmwood Avenue, Box 601, Rochester, New York 14642
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Box 601, 601 Elmwood Avenue, Rochester, New York 14642
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<thead>
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<th>DATES</th>
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Intent and Format of the Elective Program

Clinical electives are an integral part of the UR SMD curriculum. Participation in clinical electives fosters academic growth in a number of areas. All departments in the medical school sponsor electives for clinical students. Current clinical electives range from experiences in clinical research to active involvement in community and/or international health. Electives are offered in a diverse group of clinical settings from academic health centers to community hospitals. In addition to the wide variety of clinical electives outlined in this bulletin, students and faculty members may design a clinical elective experience based on student interest. Students may not engage in a formal elective sponsored by a close relative. All electives must meet specific guidelines. Students may not be paid for any elective for which they are receiving academic credit. We encourage students to work with faculty members in custom-designing electives to suit your individual professional development needs. Self-designed elective proposals must be reviewed and approved, in advance, by an appropriate UR SMD faculty member and your Advisory Dean. Students interested in designing special clinical electives should contact the Registrar’s Office for information regarding elective requirements.

The content and format of each student’s clinical elective program is created through a collaborative effort of the student with his/her advisory dean. Many factors contribute to the construction of an individual student’s elective program. Each student’s special clinical and career interests are among these factors. Additional considerations in the construction of a clinical elective program include the following:

- provision of a clinical experience of special interest that may not be otherwise covered in the curriculum
- provision of greater depth or breadth of experience in required curricular areas
- correction of an academic weakness as identified through the 2nd year or 3rd year comprehensive assessment
- provision of a mentoring relationship in patient care, research or education
- initiation or continuation of basic or clinical science research.
DHC Core and Required Clerkship Grade Definitions

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Honors</td>
<td>20%</td>
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<tr>
<td>High Pass</td>
<td>30%</td>
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<tr>
<td>Pass</td>
<td>50%</td>
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<tr>
<td>P(m)</td>
<td>0-5%</td>
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<tr>
<td>Fail</td>
<td>0-2%</td>
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</tbody>
</table>

(Must be repeated and Pass is the highest grade that can be assigned)

Incomplete (I)
Withdraw (W)
Withdraw Failing (WF)
To Be Determined (TBD)

The following grade definitions will be used for the core and required clerkships:

**Honors:** Academic and clinical performance rated as exceptional by all evaluators. Personal and professional qualities outstanding. Shows promise to excel in the most competitive residencies and will receive vigorous departmental support in applying for these. (In a typical year, approximately 20% of students will achieve this grade.)

**High Pass:** Academic and clinical performance rated as exceptional in several areas, at least very good in all others. Personal and professional qualities are excellent. Capable of succeeding in any residency and will receive strong departmental support. (In a typical year, approximately 30% of students will achieve this grade.)

**Pass:** Academic and clinical performance ranging from acceptable to very good in all areas (and may be exceptional in some areas). Personal and professional qualities are at least very good. No significant deficiencies. Most students receiving this grade will be capable of succeeding in any residency but will be challenged by the most competitive, and will receive strong departmental support although will be advised not to limit applications to the most highly competitive programs. Some students receiving this grade would not be comfortable or successful in the most competitive residency programs, will be advised to apply to less competitive (but still very good) residencies, and will receive departmental support. (This is the modal grade: In a typical year, approximately 50% of students will achieve this grade.)

**Pass marginal:** Some significant deficiencies identified, requiring remedial work (at the discretion of the clerkship director and the clerkship grading committee, albeit not repeat of the entire clerkship) before a Pass grade for the clerkship can be awarded. A Pass marginal can only be remediated to a grade of Pass, and must be remediated for promotion. Pass marginal will not appear on the final transcript. In a typical year, 0-5% of students will achieve this grade.

**Withdraw:** When a student has been enrolled for less than 50% of a clerkship and elects to withdraw or the student has been enrolled for greater than 50% of a clerkship and has a passing performance, the grade of Withdraw is assigned. The transcript will record the withdrawal with a ‘W’.

**Withdraw Failing:** When a student has been enrolled for at least 50% of a clerkship and elects to withdraw with a failing performance, a grade of WF should be assigned. When the clerkship is retaken and completed, the student will be assigned the grade earned in the retaken clerkship. The transcript will have the WF grade as well as the grade assigned in the retaken clerkship. For example:
To Be Determined: When students fail the NBME subject exam and need to re-take it but have an otherwise satisfactory clerkship performance.

Fail: Very significant deficiencies, requiring that the student repeat the entire clerkship. (In a typical year, 0-2% of students will achieve this grade.)

Incomplete: Used at the discretion of the clerkship director, usually when a student who has otherwise done passing or better work has been unable to fulfill all course requirements due to extenuating circumstances. On the final transcript, the grade of “Incomplete” may be either struck out or replaced by the final clerkship grade, depending on the circumstances.

Electives are graded as Pass or Fail.
Evaluations and Educational Experiences with Family Members

To avoid the appearance of favoritism that may result from curricular experiences with family member evaluators/preceptors, students are not permitted to engage in formal (credit bearing and/or funded) educational experiences with close relatives. In addition to the core clerkships, clinical electives, PBL’s, small group assignments, students will not be allowed to participate in URSMD funded fellowships and educational experiences with family member evaluators. Whenever possible, students should not be assigned to hospitals where relatives currently practice to avoid bias in the student’s evaluation.

For the purposes of this policy, the following are considered relatives:

- Spouse, spouse’s natural and adopted children, grandchildren, and great-grandchildren; parents, step parents, grandparents, and great-grandparents; brothers, sisters, half-brothers, and half-sisters; aunts, uncles, nieces, nephews, first cousins, and second cousins; and persons married to them

Avoiding the Appearance of Bias in Evaluations Due to Prior Relationships

The Medical School expects both faculty and students to avoid situations where a previous relationship could bias evaluations, teaching or could create the appearance of bias. In case of doubt about such a situation, the student should contact his/her Advisory Dean and the faculty member must contact the Course Director.

The school views this issue as a matter of professionalism and all suspected violations of this policy will be reviewed by the MSPRB (Classes of 2006 and 2007), the Honor Board (Classes of 2008 and forward), or Department Chair.

Procedures to Avoid the Impact of Conflicts of Interest

The following policy and procedures have been implemented to avoid the impact of conflicts of interest. A faculty member or other institutional official will automatically recuse him/herself from any discussion or vote relating to a matter where there is a potential for or the existence of a conflict of interest and state publicly that there is a personal conflict.

The SMD policy and procedures to avoid the impact of conflicts of interest will be included on the agenda of all evaluation/disciplinary MSPRB, Appeals and Honor Board meetings. The voting members will be reminded that their eligibility to participate in a discussion or vote is a result of no known conflicts of interest. (Effective October 12, 2005)
Attendance in Clinical Rotations Policy

Students on clerkships (i.e., any clinical rotation) do not routinely receive any time off. Full attendance during all aspects of clerkships is expected as part of fulfilling professional role obligations regarding educational and patient care responsibilities. In the case of unexpected absences for urgent reasons (e.g., illness), the student must make every effort to notify the clerkship director, his/her administrative assistant, the senior resident and/or his/her Advisory Dean of their absence, and upon return to the clerkship must discuss the circumstances, including remediation of work missed, with the clerkship director. Time up to two days away from each rotation (no more than one day away for rotations shorter than four weeks) may be granted by the clerkship director for special circumstances as arranged in advance. It is expected that the student making such a request will do so as much in advance as practical, and will be prepared to discuss options for remediating the work that is missed. Longer time away will not be granted except under extraordinary circumstances and at the discretion of the clerkship director.

Please note that this means that fourth year students should plan their residency interviewing for open slots in their schedule; they should not plan out of town interviews while taking a clerkship.
The University of Rochester School of Medicine and Dentistry accepts visiting medical and dental students in their final year of their academic curriculum to participate in electives at our institution and affiliated hospitals. Visiting students in their final year and in good academic standing at an LCME-approved United States medical school, a United States School of Osteopathic Medicine or a Canadian Medical School, will be required to submit their application through the AAMC Visiting Student Learning Opportunities (VSLO) /Visiting Student Application Service (VSAS). VSAS charges a fee for this service. In addition, The University of Rochester charges a non-refundable $100 administrative fee per scheduled elective. Students who attend an Osteopathic school will be required to submit their application through the Visiting Student Application Service (VSAS).

https://students-residents.aamc.org/attending-medical-school/article/students/

Visiting students may spend up to 8 weeks of clinical electives at the University of Rochester School of Medicine and Dentistry and our affiliated hospitals. For a description of electives offered at URSMD please visit the Medical School Registrar's Website.

Dental students please contact the Medical School Registrar's Office. If you are an International Visiting Student click here.

Criminal background checks must be submitted with application.

Only students attending an international medical school with which the University of Rochester School of Medicine and Dentistry (URSMD) has a formal exchange agreement will be considered for elective experiences. Such students must be in the final year of medical studies and will be allowed to do no more than twelve weeks of elective experiences. International students must direct their application requests to the appropriate people at their home institution to learn if their school is affiliated with the URSMD. If so, then student must apply through the appropriate home office.

University of Rochester School of Medicine and Dentistry students are given first choice of available elective openings. Thus, all visiting medical students are encouraged to select two alternate clinical electives in addition to their desired elective course when submitting an application.

Visiting students must register with the University Health Service and provide documentation of the following:

- Rubella and rubeola immunization (certificate or positive lab test)
- Results of a tuberculin test within the past 3 months and any follow-up
- Proof of hospitalization insurance coverage. If student ambulatory health coverage is not in effect away from the parent institution then ambulatory health coverage must be purchased through the UR SMD University Health Service at a cost of approximately $50/month. Additional information/requirement can be found on the University Health Services web page http://www.rochester.edu/uhs/primary-care/contact-uhs/
Information for Visiting Students:

On the first day of your elective you are required to check in with the Medical School Registrar's Office.

- **Medical Center ID and Parking Office:**
  You will be required to go to the Medical Center ID Office to obtain your temporary ID badge. You will also be required to go to the Parking to obtain your pass. You will need to provide vehicle make/model/license tag in order to obtain parking access.

- **Housing:** It is the responsibility of the student to find housing. Information on available temporary housing options provided in acceptance email and on the VSLO/VSAS website.

- **Professional attire:** To include a short white lab coat (hip length), is required, unless in scrubs. You may utilize the white coat from your home school.

- **Scrubs:** You may bring your own scrubs, however, should the approved elective require you to use the University of Rochester's issued scrubs, please check with and obtain scrub access from the departmental office.
  
  *The Medical School’s Registrar’s Office is unable to provide access to scrubs during your approved elective period.*

- **Pagers:** You must bring your own pager.
  
  *The Medical School Registrar’s Office is unable to provide a pager during your approved elective period.*

Access to secured areas within the medical center facilities (OR, SICU, clinics, etc) may only be provided by your elective department. If required, please contact your course director and/or support staff for assistance.

- **Medical Center Library:** Information may be located online, [https://www.urmc.rochester.edu/libraries/miner.aspx](https://www.urmc.rochester.edu/libraries/miner.aspx) Library hours: 7:30am – 8:00pm, M-F and 10:00am - 8:00pm on the weekend. After hours access request may be submitted by the department.

- If you are interested in the gym facilities on the medical center campus there is an additional fee.

- Your temporary student ID badge must be returned to the Medical School Registrar's Office or the elective coordinator at the end of your approved elective period. Should your ID badge not be returned at the end of your elective period, your evaluation form will be held from both you and your home school.
Hospital abbreviations are identified below and indicate the location of the elective:

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<tr>
<th>Abbreviation</th>
<th>Hospital Name</th>
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<tr>
<td>HH</td>
<td>Highland Hospital</td>
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<td>RGH</td>
<td>Rochester General Hospital</td>
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<tr>
<td>SMH</td>
<td>Strong Memorial Hospital</td>
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<tr>
<td>PRH</td>
<td>Park Ridge Hospital</td>
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<td>PRO</td>
<td>Private Office</td>
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<td>MCH</td>
<td>Monroe Community Hospital</td>
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<tr>
<td>Unity</td>
<td>Rochester Regional Health</td>
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</tbody>
</table>
ANS601 Anesthesiology Clerkship

Course Information

Contact Person
Cathy Ercolamento, 275-2143 catherine_ercolamento@urmc.rochester.edu

Class Year Name
Anesthesiology Clerkship

Class Code
ANS601

Elective Tags
Inpatient Service, Patient Care

Block Length
2 weeks

Students
3

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
They will receive an email prior to first day of rotation.

What time should students report?
Prior to the first day of rotation the student needs to page the resident/CRNA AND the anesthesiology attending they will be working with and set up a meeting time.

Who should they report to?
Their assigned resident or CRNA at the predetermined time.

Goal

To understand the aspects of Anesthesiology with which all physicians should be familiar.

Learning Objectives

By the end of the rotation the student should be able to:

- Demonstrate appropriate techniques for airway management in unconscious patients, including ventilation by mask, insertion of artificial airways and laryngeal masks, and oro-tracheal intubation.
- Manage ventilation in unconscious patients, including deciding on ventilator settings and using non-invasive monitors and arterial blood gases to determine the appropriateness of ventilation.
- Identify and interpret items on the anesthetic record with respect to their impact on post-operative care, including drugs used and fluids given intraoperatively.
- Explain the appropriate management of acute blood loss, and the calculation of maximum allowable blood loss.
- List the differential diagnosis of hypoxia and explain findings/tests which distinguish among the different causes.
- Describe the pharmacology of commonly used induction agents and narcotics.
- Discuss the appropriate use and monitoring of muscle relaxants for emergency and non-emergency
intubations.

- Describe the clinical application and interpretation of EKG, pulse oximetry, and capnography.
- Discuss the appropriate use of local anesthetics, including the calculation of the maximum allowable dose, description of the signs/symptoms of toxicity, and the treatment of toxicity.
- Be familiar with common airway securing devices and how/when to use them.
- Understand the differences and indications for general versus regional anesthesia versus sedation.
- Be familiar with the common drugs utilized in the daily practice of anesthesia
- Be familiar with the common resuscitative drugs used (i.e. vasopressors, antiarrhythmics, inotropes).
- Be familiar with common diseases we encounter daily (i.e. diabetes, HTN, COPD) and how they affect the care we deliver. This is the focus of the PEC day-long experience.

**Schedule of Activities**

Students are assigned to work with an Anesthesiology resident, a CRNA, or a member of the faculty, at SMH from 7:00 AM until 5:00 PM on weekdays.

Overnight call may be taken at the discretion of the Course Director. If students would like to assist a preceptor overnight, allowances will be made for the student to have off during the daytime hours.

Students will perform preoperative evaluations, participate in intraoperative care, and perform postoperative follow-up on their patients.

Procedures (such as intravenous line placement, endotracheal intubation, arterial line placement) will be performed by the student at the discretion of the resident or attending, and only after any assigned training is completed.

**Didactic Activities**

1) Morning conferences 3x a week at 06:30 - 07:00. (Breakfast usually provided.)

2) Airway workshop during first week.

3) Anesthesiology Grand Rounds on Thursday mornings from 7:00 to 8:00

4) Two sessions at the Center for Medical Simulation at SMH:
   1) Airway management workshop
   2) Crisis management in the operating room. (If scheduled)

5) Prior to the first day of the clerkship, the students will be given learning objectives and case scenarios relating to anesthesia. The issues raised by these cases should be researched independently by the student and discussed with the resident preceptor or faculty member during the course of the clinical day.

**Required Reading**

1. National Medical Series for Independent Study: Anesthesiology (This will be LOANED to all students to utilize as a reference during the rotation).

2. Select chapters from Basics of Anesthesia, 3rd ed., by RK Stoelting and RD Miller (Book can be borrowed from Gillies Library in the Department of Anesthesiology at SMH).
Student Evaluations

To receive a grade of PASS:

1. Students must turn in a log sheet documenting that the learning objectives have been covered.

2. Students must participate in all didactic activities.

3. Students must receive a satisfactory clinical evaluation from their preceptor(s) during the clerkship.

4. Students must complete an attendance record.

5. Students must complete the course evaluation.

6. Students must complete an evaluation of each of their preceptors.
Course Information

Course Director
Richard Norris Wissler M.D., Ph.D.
Contact Person
Catherine Ercolamento, 275-2143, Catherine_Ercolamento@urmc.rochester.edu
Class Year Name
Obstetric Anesthesiology
Class Code
ANS603
Elective Tags
Inpatient Service, Patient Care
Block Length
2 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
3-1400 nurses station
What time should students report?
0700
Who should they report to?
page 16-7005

Goal

To understand the theoretical and practical aspects of pain relief for labor and delivery and perioperative safety during cesarean section.

Learning Objectives

By the end of the rotation the student should be able to:
1. Perform a preanesthetic evaluation of a pregnant patient.
2. Discuss the anesthetic implications of maternal medical conditions and formulate appropriate anesthetic plans for labor analgesia or cesarean section.
3. Identify OB patients who require anesthetic consultation, and describe how to obtain it.
4. Describe the anatomy and physiology of labor pain, including differences between first and second stages.
5. Discuss the full range of labor analgesia techniques including psychoprophylaxis, parenteral narcotics, inhalation agents, epidural and spinal anesthesia.
6. Discuss the pharmacology of local anesthetics and narcotics commonly used in epidural and spinal anesthesia.
8. Discuss the anesthetic implications of maternal physiologic adaptations to pregnancy including anesthetic potencies, airway management, and risk of aspiration pneumonitis.
9. Describe maternal lumbar anatomy in relation to the administration of epidural and spinal anesthesia.
10. Perform epidural and spinal anesthetics for labor analgesia, with appropriate supervision.
11. Perform anesthesia for cesarean section, with appropriate supervision.
12. Describe methods of postoperative analgesia after cesarean section.
13. Discuss the major complications of epidural and spinal anesthesia, including evaluation and treatments.

**Schedule of Activities**

Students are assigned to the OB Anesthesia Service at SMH, with hours of 7:00 a.m. to 4:00 p.m. on weekdays. The students do not have weekend or night on-call responsibilities. The students are regular members of the clinical care team in OB Anesthesia with assigned preceptors (resident, fellow or attending anesthesiologists). The emphasis is on active participation, including procedural skills.

**Didactic Activities**

Students participate in the daily OB Anesthesia didactic sessions each weekday, with assigned readings from the assigned textbook. In addition, students discuss their learning objectives with the preceptors throughout each day.

**Required Reading**

Loaner copies of the current textbook are available. Students are encouraged to utilize the resources in the OB Anesthesia Education Office including an extensive subspecialty library, videotapes and anatomic models.

**Student Evaluations**

To receive a grade of Pass, students must turn in to the course director a learning objective log sheet and receive satisfactory evaluations from their preceptors.
ANS606 Pain Management

Course Information

Contact Person
Cathy Ercolamento, 275-2143 catherine_ercolamento@urmc.rochester.edu
Class Year Name
Pain Management
Class Code
ANS606
Elective Tags
Consultation Service, Multidisciplinary, Outpatient Service, Patient Care
Block Length
2 wks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
they will receive an email prior to first day of rotation
What time should students report?
7:15 first day of rotation
Who should they report to?
Pain Fellow, Arrive at Pain Treatment Ctr 180 Sawgrass Dr.

Goal
To become familiar with the intricacies of pain assessment and multidisciplinary management of patients with chronic, non-malignant or malignant pain.

Learning Objectives

By the end of this short rotation student should:

1. Be able to assess a patient's pain through history, physical examination, behavioral observation and medication usage
2. Formulate patient focused and goal directed pain management plan under close supervision of a fellow / NP / faculty member
3. Describe the major classes of pain (e.g. inflammatory, neuropathic, myofascial, Deafferentation pain, spasticity related pain, etc)
4. Discuss the pharmacology, indications and common side effects of analgesic and adjuvant medications (e.g. opioids, NSAIDs, neuroleptics, muscle relaxants, anxiolytics).
5. Be familiar with alternative and complementary treatment modalities available for pain management including physical therapy, cognitive behavior therapy, acupuncture etc
6. Discuss common indications for interventional techniques used in the treatment of pain.
7. Perform trigger point and sacroiliac joint injections under appropriate supervision.
**Schedule of Activities**

Students are assigned to the outpatient pain service at the Pain Treatment Center, located at Sawgrass Surgical Center, Suite 210; working hours are from 0730 am to 1700 during weekdays. They are a part of the multidisciplinary team comprised of residents, fellows, nurse practitioners, clinical psychologist and attending pain management faculty. They are not expected to take any inhouse or pager call during this rotation. A detailed schedule including lectures and conferences is available in the clinic.

**Didactic Activities**

Emphasis is on active participation in the following activities:

- Regular conferences on M/T/W and Friday starting at 0730. Monday conference time is variable.
- Thursday: Anesthesiology grand rounds from 0700-0800 in room K 307.
- Hands on teaching in the clinic and procedure room.
- Fluoro imaging of the spine and interventional practice on a dummy with a pain management fellow. Time flexible.

**Required Reading**

Copies of book chapters to be reviewed during the rotation can be made after consultation with the fellow. Students are encouraged to use resources available in the Gilles Library and pain office.

**Student Evaluations**

Students are responsible for keeping a log of cases and procedures he/she participates in. Students are expected to answer and review a set of case scenarios regarding the use of adjuvant medications for chronic pain. Students receive a grade depending on a composite evaluation by their preceptors.
Course Information

Contact Person
Cathy Ercolamento, 275-2143 catherine_ercolamento@urmc.rochester.edu

Class Year Name
Hemodynamic Monitoring

Class Code
ANS610

Elective Tags
Inpatient Service, Patient Care

Block Length
1 week

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
2nd Year, 3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
See Welcome Letter, 7:00 a.m. Monday morning to the On-call cardiac anesthesiologist

What time should students report?
7:00 a.m.

Who should they report to?
On-call cardiac anesthesiologist

Goal

To master concepts in advanced cardiovascular physiology and invasive hemodynamic monitoring in the clinical setting of the operating room.

Learning Objectives

By the end of the rotation the student should be able to:

- Understand the technical aspects of arterial line and pulmonary artery catheter insertion.

- Understand the clinical applications, complications and preventative measures involved in invasive hemodynamic monitoring.

- Interpret hemodynamic data.

- Apply the hemodynamic data to the care of the surgical or critically ill patient.
Understand the role of transesophageal echocardiography for intraoperative hemodynamic monitoring.

**Schedule of Activities**

Students work in the operating room at SMH under the direction of the cardiac anesthesiologist starting at 7 a.m. to approximately 5 p.m. on weekdays. Emphasis is on hemodynamic monitoring and its application to the care of the cardiac surgical patient.

**Didactic Activities**

Emphasis is on clinical experience and "bedside" teaching. One-on-one or one-on-two tutorials supplement this experience. In addition, students may participate in workshops using the anesthesia human patient simulator focusing on hemodynamic assessment and cardiovascular management.

**Required Reading**

2 Book Chapters from *Cardiac Anesthesia: Principles and Practice, 2nd Edition*, Fawzy G. Estafanous, MD; Paul G. Barash, MD; and J.G. Reves, MD., as well as supplemental documents by the University of Rochester Cardiac Anesthesia faculty.

**Student Evaluations**

To receive a grade of Pass, students must participate in clinical cases, attend tutorials sessions, document that the learning objectives have been covered, interpret and discuss case studies in cardiovascular medicine, and submit a log of their cases and attendings. Course materials will be sent via e-mail the week before the course. Students who will be on vacation that week may arrange with Susan Donahue to receive the information earlier. Essential information is contained in the Welcome Letter which is in this mailing.
DHP601 Independent Study Focusing on Deaf Health

Course Information

Course Director
Jason M. Rotoli M.D.

Contact Person
Isaiah Evans (isaiah_evans@urmc.rochester.edu) Dr. Jason Rotoli (Jason_Rotoli@urmc.rochester.edu)

Class Year Name
Independent Study Focusing on Deaf Health

Class Code
DHP601

Elective Tags
Research-Basic science

Block Length
Must obtain permission from Dr. Rotoli before scheduling

Students
10

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Arrange with Research Advisor at NCDHR

What time should students report?
TBA

Who should they report to?
Research Advisor

Goal

Prequisites: Enrollment in Deaf Health Pathway (DHP) and completion of Deaf Health Seminars 1, 2 & 3; or permission of the Pathway Director. Follow the below steps:

1. Obtain approval from Dr. Rotoli
2. Complete application to enroll in the Deaf Health Pathway (intention to complete)
3. E-mail the DHP Director (Dr. Rotoli) and your mentor (if different) your intended elective dates as early as possible.
4. Complete and e-mail your proposed goals for completing the Pathway
   o What are your personal goals for completing the Pathway?
   o What goals have you accomplished to date—for example, completing the 3 seminars on Deaf Health.
   o What are the gaps between what you have done and your goals?
   o How will you use your elective time to bridge those gaps? Outline how you will spend your elective time over the four weeks to reach your elective goals.
   ? Depending on the complexity and clarity of your proposal, a meeting may be necessary prior to the start of your elective.

Students interested in completing a Deaf Health elective outside of Rochester must complete the extramural elective drop/add menu in MedSIS and receive approval from Dr. Rotoli, the Advisory Dean and the Registrar’s Office

Goal: Students will spend four weeks investigating topics of Deaf health derived from clinical, educational, linguistic, and cultural opportunities at the University of Rochester Medical Center and local community. The overall goal is for each student to develop an appropriate level of comfort and competency in working with
members of the Deaf community.

Learning Objectives

To foster interest in Deaf health and expose students to pressing issues which may impact the future healthcare practices for Deaf patients. Specific objectives will be created as a part of the student’s proposal (see below), derived from clinic/hospital-based observerships (Deaf/signing clinician, patient care interpreting), mentored research or community-based projects and engagement with community-based programs.

Schedule of Activities

Students will arrange activities with their research supervisor at the NCDHR.

Didactic Activities

Required Reading

As appropriate to the individual project of the student. Resources collected by medical students during previous Deaf Health Pathway electives are available upon request.

Student Evaluations

Upon completion of the elective (two week deadline from end date) all items required must be submitted to the Pathway Director, Dr. Rotoli, before a final grade can be submitted to the Registrar. Grades are awarded on a Pass/Fail scale.
Course Information

Course Director
Joseph J. Fantuzzo D.D.S., M.D.
Contact Person
Vanessa Buckholz
Class Year Name
Dentistry, Oral and Maxillofacial Surgery
Class Code
DNS600
Elective Tags
Outpatient Service, Patient Care, Teaching
Block Length
2 or more weeks Must contact Dept. For Approval
Students
1
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Strong Memorial Hospital Ambulatory Care Building 4th Floor
What time should students report?
9:00 a.m.
Who should they report to?
Lisa Lord

Goal

To understand the relationship of oral health care and oral surgery to general total health care and the general practice of medicine and how oral health care and oral surgical care is inter-related with total health care.

Learning Objectives

By the end of the rotation the student should be able to:
? Perform a complete intra-oral and extra-oral head and neck examination.
? Identify the following anatomical structures in patient and on x-ray: enamel, dentine, gingiva, pulp chamber, cemetum, buccal mucosa, labial frenum, pterygo-mandibular area, palatine tonsil, soft palate, hard palate, uvula, parotid, and submandibular glands and duct orifices, anatomical spaces associated with head and neck infection.
? Recognize and diagnose basic fractures of craniofacial skeleton based on clinical and radiographic findings.
? Discuss the oral manifestations of systemic disease or its treatment in patients receiving head and neck radiation, cancer chemotherapy, bone marrow transplant, HIV infection, diabetes, autoimmune disorders, e.g. Sjoren’s Syndrome.
? Understand the role of the oral and maxillofacial surgeon in the treatment and reconstruction of diseases of the maxillofacial region, including implants, cleft and craniofacial anomalies, and maxillofacial trauma.
**Schedule of Activities**

Students are assigned to the Strong Memorial Hospital, Department of Dentistry clinical facility and will work with the general practice, oral surgery and specialty providers of dental care starting at 8:30 am. They will be guided by the chief resident in Oral and Maxillofacial Surgery and General Practice Residency and work with these to examine patients, diagnose and treat dental diseases, assist in surgical procedures and attend all rounds and lectures.

**Didactic Activities**

Students will be oriented by the Dentist-in-Chief and Chairman of the department or Chief of the Oral and Maxillofacial Surgery Division on the first day of the rotation. They are expected to read about and discuss the learning objectives with their preceptor. Students will attend all the ongoing didactic activities in the department during the clerkship. These include resident lectures 8:00 - 9:00 am, Oral and Maxillofacial Surgery Rounds and other seminars.

**Required Reading**

Students will be provided with review articles in the areas related to the learning objectives on arrival in the department.

**Student Evaluations**

To receive a grade of Pass, students must keep a log of their activities, participate in the case conferences and seminars and receive a satisfactory evaluation from the residents with whom they work.
Course Information

Course Director
Maricelle U. Abayon D.M.D., M.S.
Contact Person
Dr. Maricelle Abayon, DDS, MS Maricelle_Abayon@urmc.rochester.edu.
Class Year Name
Hospital General Dentistry
Class Code
DNS601
Elective Tags
Outpatient Service, Patient Care, Teaching
Block Length
2 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
4th Year
Where should students report?
Schedule will be emailed
What time should students report?
9:00 a.m.
Who should they report to?
Person listed on schedule

Goal

To provide dental students with a didactic and practical experience in general and hospital dentistry in an outpatient hospital general dentistry service.

Learning Objectives

The student should gain experience in treatment planning and treating patients with complex medical and dental needs under a variety of conditions and using a variety of patient management techniques. The objective will be achieved through the following activities:

1. Participation in all didactic activities of the Division of General Dentistry during their rotation.

2. Observation and supervised treatment of patients in the Hospital Dental Service of Strong Memorial Hospital.

3. Participation in the Consultation Service of the Eastman Dental Center.

4. Observation of treatment of general dentistry patients in the operating room.

5. Observation of treatment of patients undergoing conscious sedation by the Dental Service in the Ambulatory Center of Strong Memorial Hospital.
**Schedule of Activities**

Students will be assigned a preceptor who is a senior resident in the General Practice Residency program. The preceptor will insure that the student participates in the activities listed above.

**Didactic Activities**

Students will participate in all conferences, seminars and lectures with the General Practice residents.

**Student Evaluations**

Externs are required to keep a log of their clinical activities and attendance in didactic activities to satisfactorily complete the externship.
Course Information

Contact Person

Class Year Name
Oral Medicine
Class Code
DNS606
Elective Tags
Outpatient Service
Block Length
2 wks Must contact Dept. For Approval
Students
0

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year

Where should students report?

What time should students report?

Who should they report to?
Course Information

Course Director
Christine Mhorag Hay M.D.

Contact Person
Katie Libby Phone (585) 275-4739 Room Number G.7522 Katherine_Libby@urmc.rochester.edu

Class Year Name
Teaching Tutorial

Class Code
DPT600

Elective Tags
Teaching

Block Length
2 weeks

Students
3

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Students will be notified via e-mail prior to the start of the elective. It will be expected that the students in this elective participate in most of the scheduled activities for the course (M-F, 8am-noon).

What time should students report?

Who should they report to?
Christine Hay, MD

Goal

Demonstrate knowledge and skill in tutoring and teaching 2nd year medical students.

Learning Objectives

At the end of the course, students should be able to:

- Tutor students who require extra help in Disease Processes and Therapeutics
- Effectively assist in laboratory instruction when needed
- Learn to write and grade examination questions
- Effectively tutor a PBL group for 2nd year medical students and critique PBL if applicable

Schedule of Activities

Students will attend DPT daily from 8-12 during their 2 week block, including labs, TBL and PBL if applicable to the scheduled block. They will work with 2nd year medical students to provide extra help if requested. Students will work together to review lecture content as the block progresses, and then review and write examination questions with the block leaders and/or course director. Students could be expected to grade one or two essay questions from the exam based on the timing of the exam in the scheduled elective block.
DPT604 Writing Elective

Course Information

Course Director
Christine Mhorag Hay M.D.

Contact Person
Katie Libby Phone (585) 275-4739 Room Number G.7522 Katherine_Libby@urmc.rochester.edu

Class Year Name
Writing Elective

Class Code
DPT604

Elective Tags
Teaching

Block Length
1 week

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?

No

Available to the following medical students:
4th Year

Where should students report?

Students will be notified of their assignment details via email by the end of the day Monday.

What time should students report?

Who should they report to?

Goal

To learn the craft of creating and editing lecture notes that will be included in the course syllabus, and have the opportunity to improve your understanding of the specific pathophysiology related to the diseases.

Learning Objectives

- Understand how to create a PBL and tutor guide or create/review lecture notes and work with faculty to confirm.
- Have the opportunity to improve your understanding of the specific pathophysiology related to the diseases in the PBL
Course Information

Course Director
Lindsey Brodell Dolohanty M.D.
Contact Person
Natasha Garcia 275-0193 natasha_garcia@umc.rochester.edu
Class Year Name
Clinical Dermatology
Class Code
DRM601
Elective Tags
Outpatient Service
Block Length
2 weeks
Students
3
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
A welcome letter will be sent prior to your start date with a schedule. Our locations are College Town 40 Celebration DR, or Red Creek 400 Red Creek DR., Suite 200.
What time should students report?
9:00am
Who should they report to?
Please contact Natasha Garcia with any questions or concerns via global email, or by phone.

Goal

Course Objectives:

To familiarize student with the field of dermatology through an overview of skin disorders, procedures, and different subspecialties.

To familiarize student with the sources of dermatologic knowledge through peers, faculty members, textbooks, and websites.

Students should develop a basic dermatologic vocabulary that enables them to appropriately describe skin lesions. For example, students should be familiar with primary and secondary skin lesions and the difference between them. It is also important to learn basic terms such as erythema, violaceous, zosteriform, verrucous, etc.

Course Organization:

1. AM Lectures (daily): optional, although highly recommended for students to attend. This is a morning
resident dermatology lecture every day from 8-8:45 AM. Please inquire with the residents to find out the location of the lecture, if interested in attending.

2. Dermatology Grand Rounds (1x monthly): Students (or first years) have opportunity to describe the skin lesions and basic morphology. Grand Rounds are held most 1st Wednesday afternoons of the month at SMH. Please report to AC-2 at 3PM for patient viewing followed by conference at 4PM. You can use 12PM-3PM for self-study.

3. Recommended basic dermatology sources:
   - AAD online learning modules: Basic Dermatology Curriculum https://www.aad.org/education/basic-dermatology-curriculum/suggested-order-of-modules (We do not provide medical students with a dermatology text, so this resource can serve as your reference during the rotation.)
   - Looking bill and Marks’ Principles of Dermatology

4. Mandatory assignment (pick one of two below) done on Thursday or Friday of your last week.

   *Quiz (based on AAD modules)

   - Have one of our Residents log into our Z-Drive

   *Interesting Case Presentation (5-10 minutes)

**Clinic Organization (role of medical student)**

- Majority involves shadowing and learning by observation – each student should pair up with a resident (2nd or 3rd year, preferably)
- Student should be allowed an opportunity to present at least 1 patient daily (unless clinic is running behind)

Student can help with clinic flow i.e. patient consent, biopsy photo (via Haiku app), and draw up lidocaine

**Learning Objectives**

By the end of the rotation the student should be able to:

- Diagnose and differentiate common skin diseases
- Develop a practical understanding and rational for the treatment of common skin diseases
- Acquire the ability to gain more specific skills including the preparation and interpretation a KOH slide.

**Schedule of Activities**

Include patient work-ups and discussion with the instructor. Time for reading will be set aside by preceptor, and viewing of a set of teaching powerpoints.

**Required Reading**
Students will be given pertinent reading assignments during the rotation.
**Course Information**

- **Course Director**: Alice Pauline Pentland M.D.
- **Contact Person**: Natalie Chan 275-1998, Natalie_chan@urmc.rochester.edu
- **Class Year Name**: Dermatology Research Elective
- **Class Code**: DRM602
- **Elective Tags**: Research-Basic science
- **Block Length**: 8 weeks
- **Students**: 2

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
5-5715-Student MUST meet with Dr Pentland BEFORE SCHEDULING the elective. Please call 275-1998 to set up appointment

What time should students report?  
per preceptor

Who should they report to?  
Research preceptor

**Goal**

To gain experience through active participation in ongoing laboratory-based research projects in the dermatology research laboratories in one of the following areas of investigation: **STUDENT MUST MEET WITH COURSE DIRECTOR BEFORE SCHEDULING ELECTIVE. PLEASE CALL 275-1998 TO SET UP AN APPOINTMENT. ELECTIVES ARE 8 WEEK CONSECUTIVE BLOCKS**

- dermatoimmunology
- pigment cell biology
- Keratinocyte biology and photocarcinogenesis
- Mind-body interactions
- Image informatics
- Chemistry/material science

**Learning Objectives**

By the end of the rotation the student should be able to:  
**TO BE DETERMINED WITH PRECEPTOR**
Schedule of Activities

A defined segment of a research project will be assigned to a student who will be working closely with a faculty preceptor and performing experiments under supervision. There will be special emphasis placed on critical literature review, experimental design, data interpretation and proper controls and preparation of experimental results for publication. There will be participation in laboratory meetings and journal clubs. The student will be able to attend major clinical dermatological conferences during the elective.

Student Evaluations

TO BE DETERMINED WITH PRECEPTOR
EDD600 Advanced Emergency Medicine Clerkship

Course Information

Course Director
Julie R. Pasternack M.D.
Contact Person
Jennifer Reis Jennifer_Reis@urmc.rochester.edu
Class Year Name
Advanced Emergency Medicine Clerkship
Class Code
EDD600
Elective Tags
Patient Care
Block Length
4 weeks
Students
2
Prerequisites
EDD400 Emergency Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Student Fellow, Visiting
Where should students report?
Clerkship Coordinators office, College Town, 44 Celebration Drive, Suite 2.100. On first Day orientation
Shapiro Conference Room, College Town, 44 Celebration Drive, Room 2.007A/B.
What time should students report?
This information will be sent out in the orientation email.
Who should they report to?
Julie Pasternack, MD

Goal

GOAL:

To expand upon the experience of the Emergency Medicine Clerkship with emphasis on assuming internship-level responsibility for the diagnosis, treatment, consultation with other services, disposition of patients, and advanced procedural responsibilities commonplace in the Emergency Department.

Learning Objectives

LEARNING OBJECTIVES:

By the end of this clerkship, the student should be able to:

- Identify patients/conditions for which emergency management is indicated.
- Document in a clear and concise fashion pertinent historical and physical findings for a patient's presenting complaint.
- Identify patients/conditions for which consultation is indicated.
· Demonstrate appropriate techniques for procedures (slit lamp exam, lumbar puncture, thoracentesis, chest tube placement, laceration repair, splinting) when indicated.

· Assist with resuscitations.

· Identify arrhythmias and address initial management.

· Discuss the differential diagnosis of emergent chest pain, respiratory distress, acute abdomen, mental status changes, shock and open fractures.

· Identify community resources (Alternatives for Battered Women, Rape Crisis, Substance Abuse Rehabilitation, Community Health Nurses, Poison Control).

· Discuss the role of the Emergency Medical Services (EMS) in Monroe County.

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**Schedule of Activities**

**SCHEDULE OF ACTIVITIES**

This is a patient-oriented emergency medicine experience individualized to the students’ particular interest in emergency medicine. Students will generally work 14 clinical shifts over 4 weeks and participate in 1 6-hour ambulance ride-along per 2 weeks of the rotation. Close supervision by residents and faculty preceptors will facilitate acquisition of clinical judgment and technical skills. Each student will be matched with an attending or third year emergency medicine resident for each shift. Clinical shifts will be 8 hour shifts including days, evenings, and nights. Emphasis is on active participation in all aspects of patient care. Students will have exposure to toxicology practices. Students will gain experience with advanced procedures frequent in the Emergency Department (endotracheal intubation, central venous access, etc.)

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**Didactic Activities**

**DIDACTIC ACTIVITIES**

Attendance to and participation in all Thursday resident lectures and conferences will be required. These include case conference, EKG readings, grand rounds, journal club, morbidity and mortality, research forum, toxicology conference, and trauma conference.

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**Required Reading**

**REQUIRED READING**


Chapters:

1 - Emergency Medical Services (pages 1-5)

8 – Cardiopulmonary Resuscitation in Adult (pages 44-48)

9 – Pediatric Cardiopulmonary Resuscitation (pages 57-64)

24 - Disturbances of Cardiac Rhythm Conduction (pages 169-192)
Tintinalli's Emergency Medicine textbook can be borrowed from the Department of Emergency Medicine and accessed through the Miner Digital Library.

**Student Evaluations**

**STUDENT EVALUATIONS**

This is a PASS/FAIL course.

To receive a grade of satisfactory the student must maintain perfect attendance, turn in a log sheet documenting that the learning objectives have been covered, and receive satisfactory clinical evaluations from their preceptors during the rotation.
EDD609 Wilderness Medicine Elective

Course Information

Course Director
Julie R. Pasternack M.D.

Contact Person

Class Year Name
Wilderness Medicine Elective

Class Code
EDD609

Elective Tags
Patient Care

Block Length
2 wks Must contact Dept. For Approval

Students
10

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?

What time should students report?

Who should they report to?
**Course Information**

Course Director  
Kayla J. Dewey M.D.  
Contact Person  
Course Director = Kayla Dewey, kayla_dewey@urmc.rochester.edu  
Class Year Name: Emergency Ultrasound Elective  
Class Code: EDD611  
Elective Tags: Patient Care  
Block Length: To add this course, please contact the Course Director with proposed 2 week block for approval.

Students: 1  
An elective experience is sometimes "split" by these weeks. Is it okay to split? No  
Available to the following medical students: 3rd Year, 4th Year, International Visiting, Visiting  
Where should students report? SMH Emergency Department  
What time should students report?  
Who should they report to?

**Goal**

To expose students to the breadth of point-of-care ultrasonography and how it is applicable to the practice of emergency medicine, and to gain hands-on experience in obtaining images on emergency department patients and then work towards image interpretation in real time.

**Learning Objectives**

By the end of the clerkship the students should:

1. Gain basic knowledge of the physics of ultrasound  
2. Understand difference between point-of-care versus comprehensive exams  
3. Gain basic skills in image acquisition for POCUS exams (FAST, echo, biliary, aorta, renal, pelvic, MSK/DVT, procedural guidance)  
4. Understand use of POCUS by emergency physicians

**Schedule of Activities**

1. Attendance at weekly QA meeting (Thursday afternoons)
2. 8 hands-on scanning shifts in the ED with EM ultrasound faculty, fellows, or residents

3. Completion of patient logs including follow-up information

4. Completion of case presentation, presented at week 2 QA meeting

5. Completion of required reading assignments (see Required Reading)

Didactic Activities

Some lectures will be given by ultrasound faculty and residents during weekly conference and QA meetings but most teaching will be hands-on with one-on-one scanning sessions between the student and the faculty. Hands-on teaching will be supplemented by use of e-books and videos listed below under required reading.

Required Reading

E-books provided to students:

Introduction to Bedside Ultrasound vol 1: intro video, chapters 1, 2, 3, 6, 7, 8, 10, 11, 12

Introduction to Bedside Ultrasound vol 2: chapters 1 and 15

Point of Care OB Ultrasound: chapters 4 and 6

5minutesono.com videos: knobology, FAST, EFAST, cardiac views, cardiac function, pericardial tamponade, gallbladder, AAA, hydronephrosis, bladder volume, fetal heart rate, soft tissue

Optional readings:


Student Evaluations

To receive a grade of Pass, students must turn in a log sheet documenting the scans they have completed along with clinical information about the patient and any follow-up imaging that was obtained. They must also successfully complete the requirements of participation in scanning shifts and ultrasound QA meetings.
Course Information

Course Director
Bruce Allan Barron M.D.
Contact Person
Debbie Klein, 487 - 1010, debbie_klein@urmc.rochester.edu
Class Year Name
Occupational and Environmental Medicine
Class Code
EHS601
Elective Tags
Patient Care
Block Length
2 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Strong Occupational and Environmental Medicine Calkins Corporate Park 400 Red Creek, Suite 220
Rochester, NY 14623
What time should students report?
0830
Who should they report to?
Bruce A. Barron, MD, MS

Goal

Demonstrate knowledge and skills in performing occupational and environmental clinical assessments.

Learning Objectives

Discuss the different types of services offered by occupational and environmental medicine programs (preventive, medical, and rehabilitative). Discuss the role of toxicology, industrial hygiene, and ergonomics as it relates to occupational and environmental medicine. Demonstrate an understanding of the New York State Workers' Compensation system, including successful completion of a C4 report to the Workers' Compensation Board.

Schedule of Activities

The student will participate in clinic activities within the Division of Occupational and Environmental Medicine.

Didactic Activities

There will be formal didactic sessions including lectures on hearing conservation programs and audiogram interpretations, principles of industrial hygiene and toxicology, preventive medicine, agricultural medicine, ergonomics, and occupational biopsychosocial assessments. Additionally, the student may attend monthly
Occupational and Environmental Medicine Clinical Updates and Grand Rounds.

**Required Reading**

Students will be given pertinent reading assignments during the rotation.

**Student Evaluations**

The student will be evaluated through direct observation of physical assessments, case presentations, and participation in didactic sessions.
Course Information

Course Director
Glenn Todd Schneider M.D., M.S.
Contact Person
Sheila K. McCart, 585-276-5181, sheila_mccart@urmc.rochester.edu
Class Year Name
Otolaryngology Sub-Internship
Class Code
ENTEXT
Block Length
4 weeks
Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
4th Year
Where should students report?

What time should students report?

Who should they report to?
paul_lambert@urmc.rochester.edu; jamespmanning_urmc.rochester.edu;
Daniel_martin@urmc.rochester.edu

Goal

Rotation Goals

1. Present a 30 minute talk at Otolaryngology Grand Rounds on the last Thursday of the month. This talk will include a brief presentation of a patient seen while on service and a discussion of current management or controversies as related to this patient.
2. Become an active member of the in-patient team by demonstrating rounding skills, helping with consults, and assisting in the operating room.
3. Talk through the management of basic inpatient consults with the medical school liaison as outlined in the learning objectives at the end of the rotation.
4. Talk through the steps of basic in-patient procedures with the medical school liaison as outlined in the learning objectives at the end of the rotation.

Learning Objectives

Learning Objectives:

1. Understand inpatient management of post-operative Otolaryngology patients including relevant labs, imaging, monitoring, and medications. As well as identifying common signs of early and late post-
operative complications.

2. Learn how to prepare and perform inpatient rounding including efficient patient presentations, collection of relevant labs and imaging findings, and knowing what equipment is necessary when examining patients.

3. Know how to manage and evaluate common in-patient Otolaryngology consults including tracheostomy, parotitis, mastoiditis, invasive fungal sinusitis, pre-septal cellulitis, and basic facial trauma.

4. Learn to perform the steps of basic consult procedures at a PGY-1 level including: drainage of a peri-tonsillar abscess, tracheostomy change, control of tracheostomy bleed, and control of epistaxis.

Schedule of Activities

Rotation Structure

Head and Neck Team

The Head and Neck Cancer team is typically a busy service with ICU, stepdown, inpatient floor status and consult patients based on WCC5 at SMH. General ENT consults at SMH are taken by this team every Monday / Wednesday / Friday which will provide the sub-intern with common issues seen in a tertiary hospital. The student should plan to round and present on at least four consult and postoperative patients for which they were involved in the initial evaluation and/or surgical management. The goal will be to have the student have at least one of these four patients be an ICU or step-down status patient to follow to understand the goals of critical care for ENT patients which they may see in their internship. On non-operative days, the sub-intern will participate with the residents in the Wilmot Cancer Center head and neck clinic and help with consults.

Inpatient Specialty Service

In the rare week that the Head and Neck team does not have inpatient operative cases or clinics (conferences, attendings on vacation, etc), the sub-I will participate with inpatient operative cases at Strong with the specialty team attendings. They will also be expected to help with Strong consults with the specialty team if participating in the ORs on Tuesdays and Thursdays. They will continue to round with the Head and Neck team and present patients on the Head and Neck service only.

Required Reading

Pre and Post Service Requirements / Suggestions

1. ENT Elective (2 weeks): students applying to ENT are strongly encouraged to participate in this two week elective either in their 3rd or 4th year to get an ambulatory experience.

2. ICU / Medicine / General Surgery: students applying to ENT are also strongly encouraged by our department to rotate for at least 2 weeks in their 4th year on an ICU / Inpatient Medicine / General Surgery service to prepare for non-ENT rotations during their intern year.

Student Evaluations

Grading

Honors, High-Pass, Pass, Fail
Grading will be based on:

1. Written feedback on daily performance, improvement throughout the rotation, preparation for rounds and OR cases, and ability to perform at a PGY-1 level will be collected from the residents, attendings, and OR/Floor staff at the end of the rotation.

2. Written feedback on student’s 30 minute talk will be evaluated based on the ability of the student to present the case in an efficient manner, ability to answer questions from our residents and staff, as well as understanding of the current literature on this topic.
FAM608 Family Medicine Elective

Course Information

Course Director
Elizabeth Joy Brown M.D., M.P.H.
Contact Person
Laurie Trobia, (585) 273-5677 or 279-4828 laurie_trobia@urmc.rochester.edu
Class Year Name
Family Medicine Elective
Class Code
FAM608
Elective Tags
Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research-Clinical
Block Length
2 or 4 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
If not otherwise advised, they should report to Highland Family Medicine Center, 777 S. Clinton Avenue, Rochester, NY 14620.
What time should students report?
7:45AM
Who should they report to?
Elizabeth Brown

Goal

To develop further and refine skills in the diagnosis and management of common problems in urban, inner-city, and/or rural ambulatory community-based Family Medicine practice.

Learning Objectives

By the end of the rotation the student should be able to:
1) Diagnose and treat 20 most common presenting concerns in family practice
2) Demonstrate skills in cultural competency, including caring for patients of various races, ages, ethnicities, and socioeconomic levels
3) Demonstrate understanding of the impact of health insurance, as well as the "safety net" of care for those patients who are uninsured or underinsured, and how this affects patient care
4) Demonstrate understanding of the psychosocial and health literacy barriers to health care that may be endemic in specific populations, such as those living in the inner city
5) Demonstrate understanding of when to use ancillary health providers, such as social workers, home nursing services, outreach workers, and what services they can provide
6) Provide advocacy for patients
7) Identify and assess risk factors such as domestic violence, substance abuse, and illiteracy. Provide appropriate counseling and referral
8) Identify and learn appropriate management of common office procedures

FOCUSED EXPERIENCES AVAILABLE: (must be arranged before the elective begins, and are subject to
provider availability)

- OB/Women's Health
- Inner-city, Urban, and Rural settings
- Dermatology / Procedures (as available & in combination with others)
- Refugee Health
- GLBT (gay, lesbian, bisexual, transgender) Health
- Geriatrics with possible home visits
- Deaf Community Health
- HIV

**Schedule of Activities**

The student will see patients under the supervision of urban, inner-city, or community-based family physician preceptors in the Rochester area. Practice hours vary, as do on-call arrangements. This is primarily an outpatient experience. Students will participate in resident teaching activities one 1/2-day session per week as schedule indicates.

**Didactic Activities**

At the beginning of the elective, students discuss learning objectives with the Course Director (Dr. Brown) and their faculty mentor. These objectives should be revisited (and revised, if necessary) during the course of the elective. Generally, brief case presentations to the primary preceptor, during or shortly after the patient encounter, will constitute the majority of teaching activities. It is expected that formal feedback sessions will occur at the midpoint and at the end of the elective.

**Required Reading**


**Student Evaluations**

In order to receive a grade of Passing, the student must attend all sessions, receive a satisfactory evaluation from the preceptor(s), and return his or her evaluation of the elective prior to grades being posted.
Course Information

Course Director
Elizabeth Joy Brown M.D., M.P.H.
Contact Person
Susan Jones, (585) 273-5677 Susan_Jones@urmc.rochester.edu
Class Year Name
Family Medicine Inpatient Adult Medicine
Class Code
FAM612
Elective Tags
Inpatient Service, Patient Care
Block Length
2 weeks or 4 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, MD/PhD in Research, Visiting
Where should students report?
Student will be advised by Chief Residents.
What time should students report?
Student will be advised Normally report to Highland Hospital Lobby by 7 am of the day they start
Who should they report to?
Student will be advised when they receive their schedule.

Goal

To develop further and refine skills in the diagnosis and management of common problems in an inpatient medical service

Learning Objectives

By the end of the rotation the student should be able to:
1) Conduct a focused history and physical exam pertinent to the patient's presenting concerns

2) Diagnose and treat the 20 most common presenting concerns in inpatient family practice

3) Provide appropriate preventative medicine and screening to patients

4) Identify situations where consultation and referral are indicated and make those arrangements

5) Provide evidence of ability to engage in self-directed learning, including setting personal goals

6) Take primary responsibility in providing appropriate medical care to inpatients in the hospital on the medical service

7) Apply the biopsychosocial model of complete care for patients in the hospital
**Schedule of Activities**

The student will become an integral part of a Family Medicine resident team. In the mornings, the student will participate in inpatient rounds with the family residents during their time in the hospital. Students will be able to participate in resident teaching activities at least one 1/2-day session per week.

**Didactic Activities**

At the beginning of the rotation, students discuss learning objectives with their faculty preceptor and senior residents. These objectives are revisited (and revised, if necessary) during the elective. Generally, brief case presentations to senior residents and the primary preceptor, during or shortly after the patient encounters, and during inpatient rounds, will constitute the majority of teaching activities.

The students also take part in the teaching activities including morning report, noon report, and signout rounds.

**Required Reading**

Appropriate to the medical conditions encountered in the hospital and outpatient settings. Paulman's book, "Family Medicine Clerkship Guide," and Phillip's "Essentials of Family Medicine" will be made available to you as a reference texts while on elective.

**Student Evaluations**

In order to receive a grade of Passing, the student must be an active member of the resident inpatient service, receive satisfactory feedback and evaluations from residents, and their faculty preceptor, and return his or her evaluation of the elective before grades are posted.
Course Information

Course Director
Douglas Leonard Stockman M.D.
Contact Person
Elizabeth Brown, MD elizabeth_brown@urmc.rochester.edu
Class Year Name
Family Medicine in Rural Honduras
Class Code
FAM620
Elective Tags
Outpatient Service
Block Length
2-5 weeks Must contact Dept. For Approval
Students
2
Prerequisites
(ALL) MED300 Medicine Clerkship, SUR300 Surgery Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
**COMPETITIVE APPLICATION PROCESS FOR SPOTS - contact Elizabeth Brown elizabeth_brown@urmc.rochester.edu
What time should students report?
8:00 am
Who should they report to?
Dr. Stockman

Goal

To develop an understanding of medical care in a rural remote setting of a developing country, and to understand the interaction of acute medical care with public health

Learning Objectives

By the end of the rotation the student should be able to:

- Conduct a focused history and physical exam pertinent to the patient's presenting concerns, using an interpreter, if not fluent in Spanish.

- Be able to provide simple instructions in Spanish for common patient concerns, such as how to take a medication.

- Develop an understanding of how to provide medical care in a setting where no laboratory testing or imaging services are available.

- Educate non-medical community members on a health topic.

- Gain an understanding of how to do a community assessment.
· Provide evidence of ability to engage in self-directed learning, including setting personal goals.

**Schedule of Activities**

The student will see patients at the clinic in San José, San Marcos de Sierra, Honduras, under the supervision of a faculty family physician. The nearest hospital is a two-hour drive away on a rough dirt road. Students are expected to see patients during the day and to contribute to oncall coverage at night, which includes obstetrical services. Afternoons are spent, first for one half of the group and then for the other, in community health activities in the surrounding villages.

This elective is only offered for two weeks in October and April; the exact times of the trips will vary year to year.

**Didactic Activities**

Prior to the trip, there will be 1-3 meetings of all those participating in the trip. The student MUST be able to attend these sessions. These meetings include reports on what has been done at the site previously, as well as the goals for the current trip. In addition, repacking and distribution of medications and supplied donations occurs at these meetings. The student is expected to be able to complete assigned preparticipation reading material to gain a better understanding of the culture and region. Following the trip, there is a post-trip debriefing that the student is required to attend.

**Required Reading**

As assigned by Dr. Stockman.

**Student Evaluations**

In order to receive a grade of Pass, the student must attend all pre- and post-trip sessions, participate in the entire trip, and receive a passing evaluation from the Family Medicine faculty.

SCHEDULING: Students interested in this course must call (585) 442-7470 x721 to check on preceptor availability before enrolling. In the past, funding has been available through the University of Rochester Medical School’s International Health Advisory Committee, but the securing of funding is the responsibility of the student. A non-refundable deposit of $250 is required to secure a spot on the elective, and will be due 3 months prior to the trip.
# FAMEXT Family Medicine Sub-Internship

## Course Information

<table>
<thead>
<tr>
<th>Course Director</th>
<th>Elizabeth Joy Brown M.D., M.P.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Person</td>
<td>Elizabeth Brown <a href="mailto:elizabeth_brown@urmc.rochester.edu">elizabeth_brown@urmc.rochester.edu</a> 585-279-4640</td>
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<tr>
<td>Family Medicine Sub-Internship</td>
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<tr>
<td>Class Code</td>
<td>FAMEXT</td>
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<tr>
<td>Block Length</td>
<td>4 weeks</td>
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<tr>
<td>Students</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>(ALL) MED300 Medicine Clerkship, NEU300 Neurology Clerkship, OBG300 Obstetrics and Gynecology Clerkship, PED300 Pediatrics Clerkship, PSY300 Psychiatry Clerkship, SUR300 Surgery Clerkship</td>
</tr>
<tr>
<td>Available</td>
<td>No</td>
</tr>
<tr>
<td>Medical Students</td>
<td>4th Year</td>
</tr>
</tbody>
</table>

### An elective experience is sometimes "split" by these weeks. Is it okay to split? No

### Where should students report?

### What time should students report?

### Who should they report to?

## Goal

**Goals:** To provide senior level medical students interested in Family Medicine (FM) with a clinical experience working on the inpatient family medicine team. The sub-intern will assume primary responsibility for assigned inpatients, including cross-cover, well newborns and low risk maternity patients, under the direct supervision of upper level residents and attending physicians.

## Learning Objectives

### Learning Objectives

- Assume primary responsibility for assigned patients, to include formulation of diagnostic and treatment plans, coordination care, and planning for discharge
- Broaden understanding of pathophysiology and advance clinical problem-solving skills
- Understand the influence of family, community and society on patient and family surrounding episodes of inpatient care
- Enhance interviewing and physical examination skills
Focus oral and written communication appropriately
Share information effectively with patient and family
Prioritize and organize work effectively
Function as a team player with residents, attendings, nurses, and ancillary staff, including effectively participating in patient hand-offs
Perform commonly used procedures

Schedule of Activities

Schedule
The FM inpatient service at Highland Hospital has several components, caring for hospitalized adults on the medicine service, low-risk obstetrics patients on Labor and Delivery, and their newborns in the nursery. The Sub-internship experience includes all of these components, outlined here and described in more detail below.

First 2 weeks: Inpatient medicine team C
Second 2 weeks: Inpatient medicine team C and newborn nursery
Inpatient OB- as schedule allows and patients in labor in afternoons and 1 evening per week. Goal 4 deliveries for 4 week long rotation.

Inpatient Medicine Team C Highland Hospital

Supervising team consists of an R3, R2, R1 and FM attending

The team admits all patients who receive their primary care at Highland Family Medicine, Brown Square Health Center. The team takes admissions until 4 PM daily including the weekend. The sub-intern will follow the same schedule as the team.

New admissions are assigned by the R3 between the sub-Intern, R1, and R2. Initial patient load will start with 2 patients and then increase to up to 4 patients consistent with typical R1 workload at the beginning of the year. The sub-intern’s assignment will not exceed 5 patients total.

Duties: The Sub-Intern is responsible for writing the admission note and all orders for their patients, and having them cosigned by the R3. The sub-Intern is responsible for daily rounding on their patients, communicating with attending and specialists and creating sign out document to night coverage. Sub Intern is first call for their own patients. On afternoons when the R1 or R2 is in clinic, the sub-intern will share first call for resident patients as well, with the R3 and FM attending as back up.

Schedule: Team rounds take place at 9:30 every morning and sub-Intern will be responsible for presenting their patients during rounds.

Call and weekends: The sub-intern will take call with the team. The sub-Intern will work one weekend day (when the R3 is rounding) and have the other weekend day off.

Obstetrics and Newborn rounding

Supervising team consists of the FM OB attending, FM resident CCP for the mother and newborn.

Starting during week 3, the sub-intern will also be responsible for rounding on up to 2 newborns per day, assigned after discussion with the FM OB attending on call. Rounds will be done between 8:30-9:30 with the OB attending on call and will not conflict with medicine rounding. Sub-Interns will be responsible for pre-rounding and note writing on these patients.

As obstetrics is unpredictable there will not be scheduled time devoted to being on the labor floor but rather
in consultation with FM OB attending on call will involve students in labor and delivery management of FM patients with goal of students being involved with 4 deliveries during the 4-week rotation. Due to medicine team responsibilities this will be an option in the afternoons and up to 1 evening per week.

**Work hours and coverage:**

*Student will be required to have 12 hours off if they stay late for a delivery before may come in to round on medicine team. It will be the student’s responsibility to communicate proactively with the Team C attending and senior resident in this case.*

When the Sub-intern is participating in the care of a laboring patient or required by duty hours to be away from the medicine service, they will be expected to sign out their medical patients to the senior Team C resident, just as FM residents do when they manage continuity patients on OB.

### Didactic Activities

**Teaching:**

The sub-intern would attend teaching conferences with the resident team, including:

- FM morning report on Mondays from 7:30 – 8:30 on East 4. The sub-intern will present one case during the rotation.
- Noon conferences on South 5 (lunch included)
- Sign out rounds at 4 PM in the Napadano room
- Thursday afternoon FM teaching every other week may be included if the service is light

### Student Evaluations

**Evaluations:**

Sub-interns are evaluated by their supervising residents, interns, and attending physicians using the on-line system. Grades are assigned by the sub-internship director based on these evaluations.
HDC601 Teaching Tutorial in Host Defense

Course Information

Course Director
Brian M. Ward Ph.D.
Contact Person
Isaiah Evans isaiah_evans@urmc.rochester.edu
Class Year Name
Teaching Tutorial in Host Defense
Class Code
HDC601
Elective Tags
Teaching
Block Length
1 week Must contact Dept. For Approval
Students
8
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
To be arranged
What time should students report?
9:30 am
Who should they report to?
Dr. Ward

Goal

*Note* You are able to sign up for more than one week of elective credit, however, you will have to submit a separate add request for each one.

To give the student an opportunity to revisit the course content taught in Host Defense. To allow the student an opportunity to teach medical students in the Problem Based Learning or Small Group setting.

Learning Objectives

1. The student will have reviewed relevant Host Defense Material.

2. The student will have taught in either the PBL or lab setting.

3. The student will have assessed the performance of the students they taught.

4. The student will have developed a teaching module for Host Defense.

Schedule of Activities

*Note* You are able to sign up for more than one week of elective credit, however, you will have to submit a separate add request for each one.
The student will be responsible for attending the preparation meetings for the labs or PBLs they will teach. Participants will be responsible for a written evaluation of the students to be given in a timely manner. Students are expected to attend any lectures in Host Defense that will benefit them

**Didactic Activities**

Assist with either test preparation, PBL case preparation, and laboratory improvement.

The student will teach in the PBL or lab setting. They will develop a module to be used in Host Defense. This module could be for a small group activity, a laboratory or a PBL case.

**Required Reading**

The preparation reading for the PBL or labs they will teach. Any reading necessary for the development of the teaching module.

**Student Evaluations**

The students will be evaluated by their performance as judged by their evaluations of the students, and student evaluation of them
LHP605 Interpretive Services Experience

Course Information

Course Director
Daniel M. Yawman M.D.
Contact Person
Email Dr. Yawman (Daniel_Yawman@URMC.Rochester.edu) and Isaiah Evans with anticipated dates of participation at least 1 month ahead of requested date.

Class Year Name
Interpretive Services Experience

Class Code
LHP605

Elective Tags
Patient Care
Block Length
2 weeks
Students
20

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year
Where should students report?

What time should students report?

Who should they report to?

Goal

BLOCK LENGTH: 2 Weeks

DATES OFFERED: Students must contact Dr. Yawman before scheduling.

PREREQUISITES: Enrollment in Latino Health Pathway (LHP) and completion of Latino Health Seminars 1, 2 & 3

Follow the below steps:

1. Complete application to enroll in the Latino Health Pathway (intention to complete)
2. Receive at least a high intermediate score on the Language Line Assessment
3. Complete Latino Health Seminars 1, 2 & 3
4. E-mail the LHP Director (Dr. Yawman) and Isaiah Evans your intended elective dates as early as possible.

Goal: To expose students to Spanish speaking patients from various countries so they can be exposed to different dialects and increase their understanding of medical and colloquial Spanish.

Description: This is a 2 week elective set up with the Spanish interpreters through SMH Interpreting Services. The student will shadow the medical interpreter whenever interpreting services are needed on campus. The student will not be interpreting for patients.
Learning Objectives

1. To increase medical and colloquial Spanish vocabulary.
2. To expose students to communication barriers that exist in the Latino community.
3. To improve proficiency of comprehension by exposure to different dialects.

Required Reading

To be determined.
**Course Information**

Course Director
Anthony P. Pietropaoli M.D.

Contact Person
Bill Fuller 275-2050 willard_fuller@urmc.rochester.edu

Class Year Name
Medical Intensive Care Unit

Class Code
MED605

Elective Tags
Inpatient Service, Patient Care

Block Length
2 or 4 weeks

Students
2

Prerequisites
MED300 Medicine Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?

No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
Please call or e-mail Bill Fuller a few days prior to the start of the rotation for details.

What time should students report?
8 AM

Who should they report to?
TBD

**Goal**

At the end of this rotation, the student should be able to articulate the initial diagnostic approach to and management of patients with acute hypoxemic respiratory failure, acute on chronic respiratory failure (e.g. exacerbation of COPD), acute respiratory distress syndrome (ARDS), sepsis and septic shock, and multisystem organ dysfunction. Basic principles of ventilator management including basic ventilator settings and trouble shooting will also be expected.

**Learning Objectives**

The student will join the Medical Intensive Care Unit Team at Strong Memorial Hospital. The MICU Team consists of an Attending, Fellow, and Interns and Residents in Internal Medicine or Emergency Medicine and manages all patients in the MICU on 8-1600, 7-1600 and step-down patients on 8-3400. The student will accompany the team on rounds and assist the intern/resident team with new admissions during the day. Opportunities for night call will also be available. The student will be expected to write thorough but succinct admission notes and daily progress notes on their patients, and present their patients to the Attending and Fellow during formal work rounds in the morning and informal afternoon/evening rounds. The student will not be expected to write orders or perform procedures (e.g. central line insertion), but can assist
the intern/resident team. The student will be expected to provide a 5-10 minute overview of evidenced based management of one of his or her cases once per week on rounds (total of two presentations). The student may have the opportunity to participate in family meetings at which end-of-life care is discussed. Student will be expected to attend regularly scheduled conferences (e.g. Daily Medical ICU lectures at 3 PM, City Wide Chest Conference on Wednesday morning at 8 AM, and Critical Care Conference on Wednesdays at 4 PM), and may also have the opportunity to present an interesting case at these conferences.

Schedule of Activities

Daily rounds five days per week on the MICU beginning at 9 a.m. end ending by about 1:00 p.m. Evening work rounds at about 5 p.m.

Didactic Activities

Formal didactic sessions include City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference Fridays at noon. Informal teaching sessions as part of rounds and daily lectures by the attending or fellow.

Required Reading

Student Evaluations

Student’s performance will be graded by: (i) their participation in rounds and ability to complete a coherent admission notes and daily progress notes in a timely basis; (ii) direct observation of their clinical skills including history taking and physical exam; and (iii) effectiveness as a team player.
Course Information

Contact Person
susan_darby@urmc.rochester.edu
Class Year Name
Geriatrics
Class Code
MED615
Elective Tags
Multidisciplinary, Outpatient Service, Patient Care, Primary Care
Block Length
2 weeks
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Students will report to Monroe Community Hospital 435 E. Henrietta Rd
What time should students report?
Schedule will dictate
Who should they report to?
U/R Medical Administration 2nd Floor, Faith Building, 2W Susan Darby 760-6353

Goal

This is a two week elective designed to expose students to geriatrics in various care settings in the Rochester community and to allow students to understand the medical and biopsychosocial needs of the aging population and apply the principles of geriatrics into clinical practice.

Learning Objectives

By the end of the rotation the student should be able to:
Distinguish normal from pathologic aging.
Demonstrate appropriate communication and interpersonal skills when interacting with older adults.
Perform an appropriate physical exam with attention to physical signs of aging, functional assessment and mental status.
Recognize early reversible signs of geriatric syndromes and identify appropriate interventional strategies to prevent/postpone institutionalization.
Describe the work up and management of common geriatric syndromes such as dementia, delirium, falls, urinary incontinence, malnutrition and polypharmacy.
Actively participate as a team member in the Geriatric Assessment Clinic and in the care plans of the nursing home and rehabilitation patients.
Experience various community resources available for the care of older adults at home.

Schedule of Activities
Schedules will be provided upon arrival to the rotation

**Didactic Activities**

Students will participate in didactic sessions in the Division of Geriatrics including weekly Geriatric Grand Rounds, Geriatric Journal Club and Fellows’ Conference.

**Required Reading**

Will be sent via email with schedule

**Student Evaluations**

Preceptor evaluations
Course Information

Contact Person
Michelle Snyder, 5-4290, Michelle_snyder@urmc.rochester.edu
Class Year Name
Clinical Cardiology
Class Code
MED630
Elective Tags
Consultation Service
Block Length
2 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Monday mornings first day to Cardiology Morning Report, in the Cardiology Conf Room, G1460 offices.
What time should students report?
8:00 AM
Who should they report to?
Consult Team Fellow at Morning Report on first day

Goal

To instruct students in general aspects of clinical cardiology, and to give them familiarity with techniques used in this discipline, especially electrocardiography.

Learning Objectives

By the end of the rotation the student should be able to:
Have a knowledgeable approach to the patient with cardiovascular disease, and be able to take a cardiovascular history and perform a physical examination.
Be familiar with the major diagnostic categories of cardiovascular disease, and have information about the diagnostic approaches and therapy of these conditions.
Have considerable information about interpretation of electrocardiograms, and some familiarity with other specific diagnostic tests, including treadmill exercise, Holter monitoring, echocardiography, nuclear cardiology tests, and cardiac catheterization.
Develop an approach to preventative cardiology, a discipline with which all physicians should be familiar.

Schedule of Activities

On first day of rotation, go to Room G-1460 next to patient discharge for Morning Report at 8 AM.
Students make rounds with faculty members of the Clinical Service at Strong Memorial Hospital. There are ample opportunities to work up individual cases, to attend conferences, and to learn from faculty about diagnostic testing, especially electrocardiography.

**Didactic Activities**

The Cardiology Unit has a full schedule of conferences, most of which will be instructive to students and of interest to them. There are also frequent one-on-one instruction sessions with faculty of the Clinical Service, especially in the area of electrocardiography.

**Required Reading**

None specifically required, but the textbooks by Braunwald and by Hurst are an excellent source of reference material.

**Student Evaluations**

Grades for overall course performance are given at the end of the rotation by course directors.
Course Information

Contact Person
Dr. Eugene Storozynsky 585-273-2703 Eugene_Storozynsky@urmc.rochester.edu
Heart Failure Management
Class Code
MED634
Consultation Service, Inpatient Service
Block Length
2 weeks
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
G1460
What time should students report?
9am
Who should they report to?
Fellow on Service

Goal

To instruct the students in the proper medical and surgical management of inpatients and outpatients with chronic and acute heart failure.

Learning Objectives

By the end of the rotation the student should be able to:

1. Understand the initial evaluation of the patient with new-onset heart failure.
2. Understand the treatment options for acute heart failure
3. Select proper medical therapy for patients with heart failure
4. Understand the proper role of inotropic therapy, cardiac transplantation, and ventricular assist devices
5. Appreciate the epidemiology of heart failure
6. Understand the important role of preventive measures in treating patients with heart failure, or those at risk for heart failure
7. Understand the different causes for cardiomyopathy
8. Appreciate the differences between patients with heart failure with and without preserved systolic function.

Schedule of Activities
Students will round with the inpatient heart failure and transplantation attendings and will also be able to attend the heart failure outpatient clinics. Attendance at diagnostic procedures such as right heart catheterizations and coronary angiography will be encouraged and students may also observe cardiac transplantations when they occur.

**Didactic Activities**

The cardiology unit has a full schedule of conferences including a weekly heart failure and transplantation conference. There are also frequent one-on-one instruction sessions with faculty of the Clinical Services.

**Required Reading**

None specifically required, but journal articles on recent topics of interest will be distributed regularly.

**Student Evaluations**

Grades for overall course performance are given at the end of the rotation by course directors.
**Course Information**

Course Director  
John D. Bisognano M.D., Ph.D.  
Contact Person  
Michelle Snyder michelle_snyder@urmc.rochester.edu, 275-4290  
Class Year Name  
Outpatient Cardiology  
Class Code  
MED635  
Elective Tags  
Outpatient Service, Patient Care, Primary Care  
Block Length  
2 weeks  
Students  
1  
Prerequisites  
MED300 Medicine Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
Students should email Dr. Bisognano one week prior to start of course to arrange starting point.  
What time should students report?  
8:00 a.m. -- Generally at Cardiology Morning Report  
Who should they report to?  
John Bisognano

**Goal**

To develop an in-depth understanding of the evaluation and treatment of patients with conditions commonly seen in the outpatient cardiology setting. This includes chest pain, heart failure, hypertension, chronic coronary disease management, as well as risk factor treatment. Also, to become familiar with the diagnostic and therapeutic options available for patients with cardiovascular disease. Students will also be assigned to general cardiology outpatient clinics but will also have the opportunity to spend time in procedural and specialty areas as time permits.

**Learning Objectives**

By the end of the rotation the student should be able to:

1. Understand the goals in treating patients who present to the outpatient setting with cardiovascular issues  
2. Perform appropriate evaluation in patients with cardiovascular complaints  
3. Construct a treatment approach for patients with cardiovascular complaints  
4. Understand appropriate selection of cardiovascular diagnostic tests  
5. Recommend appropriate medical and surgical treatment for patients with cardiovascular disease

**Schedule of Activities**
Students will attend clinic with cardiology faculty including members of the hypertension program, preventive cardiology faculty, general cardiology faculty, as well as interventional cardiologists involved in the treatment of peripheral artery disease. Students may also round, on infrequent occasion, on the inpatient cardiology and vascular services whenever there are patients of interest in the hospital. There will be additional opportunities to attend clinical conferences and to spend time in the vascular, cath, testing, and electrophysiology laboratories.

**Didactic Activities**

The Cardiology Division has a full schedule of conferences, and most will be of interest to students in this rotation. There will be frequent one-on-one instruction with faculty of the Clinical Services.

**Required Reading**

None specifically required, but journal articles of interest will be distributed throughout the rotation.

**Student Evaluations**

Grades for overall course performance are given at the end of the rotation by course directors.
**Course Information**

Course Director  
James Paul Eichelberger M.D.  
Contact Person  
Michelle Snyder, 275-4290 michelle_snyder@urmc.rochester.edu  
Class Year Name  
Combined Electrocardiography/Cardiology Clinic  
Class Code  
MED637  
Elective Tags  
Outpatient Service  
Block Length  
1 or 2 weeks  Contact Dept. For Approval.  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year  
Where should students report?  
Variable - see description under Descriptions/schedule  
What time should students report?  
Variable - see description under Descriptions/schedule  
Who should they report to?  
Variable - see list of participants under descriptions/schedule

**Goal**

NOTE: STUDENT SHOULD EMAIL michelle_snyder@urmc.rochester.edu or CALL 275-4290 TO CHECK ON AVAILABILITY OF DESIRED DATES

Goals/Objectives

1. To improve electrocardiographic interpretation skills  
2. To provide an electrocardiographic experience in a clinical context of patient evaluation  
3. To expand upon clinical cardiology skills as they related to an outpatient setting

**Learning Objectives**

1. To improve electrocardiographic interpretation skills  
2. To provide an electrocardiographic experience in a clinical context of patient evaluation  
3. To expand upon clinical cardiology skills as they related to an outpatient setting

Note: STUDENT SHOULD CALL TO CHECK ON AVAILABILITY OF DESIRED DATES
Schedule of Activities

Course Duration/Schedule

1. Elective duration may vary from 1-2 weeks, depending on availability of preceptor and student, to be individually arranged.
2. Usually only one student per preceptor will be assigned.
3. Available weeks will be dictated by preceptor availability. **STUDENT SHOULD CALL TO CHECK ON AVAILABILITY OF DESIRED DATES**

Course Expectations/Organization

1. Prior to elective start date, the student is expected to contact the elective coordinator and individual preceptor to obtain confirmation, location details and a packet of “unknown” electrocardiograms for interpretation (provided by the elective coordinator).
2. The student will attend the majority of the preceptor’s outpatient cardiology clinics that are scheduled throughout the rotation as dictated by the preceptor. This may vary from 3-5 half days/week.
3. The student will play an active role in all aspects patient evaluation, treatment and communication with referring physicians.
4. The course will have an emphasis on electrocardiographic interpretation for each patient evaluated.
5. The student will be responsible for interpreting a pre-specified packet of “unknown” electrocardiograms outside of clinic, to be reviewed with the preceptor prior to completion of the elective.
6. As time and availability permit the student will also have an opportunity to observe outpatient cardiac testing including echocardiography, stress testing and nuclear imaging.

Participating Attending Preceptors / Contact Information

1. James P. Eichelberger, MD 2400 S Clinton Ave. Clinton Crossings Building G, ground floor. Phone: 275-4290. Email: James_Eichelberger@urmc.rochester.edu (office contact: Michelle Snyder, 275-4290)
2. Tom Curran, MD: 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact Jackie Doran, 276-1645)
3. Maurice Vaughan, MD: 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact: Jackie Doran, 276-1645)
5. Roy Weiner, MD 140 Canal View Boulevard, Suite 102 Rochester, NY 14623. Phone: 338-2700 (Office contact: Jackie Doran 276-1645)
6. Hanna Mieszczanska, MD 2400 S Clinton Ave. Clinton Crossings Building G, ground floor. Phone: 341-7700

Required Reading

The student will be responsible for interpreting a pre-specified packet of “unknown” electrocardiograms outside of clinic, to be reviewed with the preceptor prior to completion of the elective.
Course Information

Contact Person
Mary Jane Dyer 275-8635 or 273-4628 maryjane_dyer@urmc.rochester.edu
Class Year Name
Clinical Endocrinology - Metabolism
Class Code
MED643
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care
Block Length
2wks or 4wks
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Contact our office by phone for specific instructions 273-4628
What time should students report?
9:00 A.M.
Who should they report to?
"endocrine fellow on-service" and/or Mary Jane Dyer

Goal

To become more knowledgeable regarding the diagnosis and treatment of endocrine diseases. This course offers exposure to a large variety of endocrinologic issues as they are managed primarily in the outpatient setting. The rotating student will also be able to take advantage of inpatient consult service, and will participate actively in the academic conferences offered by the division.

Learning Objectives

By the end of the rotation the student should be able to:

- Perform appropriate endocrine exams.

Discuss the purposes of endocrinological tests and when to appropriately order them.

- Demonstrate the ability to integrate the history, physical exam, and lab results in order to reach a practical diagnostic conclusion in patients with endocrinologic conditions.

- List the available treatment options for the management of diabetes, thyroid and pituitary disease as well as the other endocrinologic disorders encountered and how to apply them.

Schedule of Activities
Student will spend 5 days/week either in the Endocrine Clinic, rotate in the Neuroendocrine Multidisciplinary Clinic, participate to the Endocrine Consult Service, or at Endocrine Unit Conferences. 4th year URSMD students may be scheduled with patient(s) (NPV only) during the Thurs (Diabetes) and Friday (General Endo) PM clinics. Electronic clinic notes will be done using eRecord and “routed” to be signed by the endocrine supervising MD. It is important that all notes are “routed” and “reassigned” to the supervising Attending. 3rd year URSMD or foreign students may be reassigned patients from the fellows/resident schedule at the discretion of the supervising attending. In both the clinic and on the consult service he/she will work closely with an assigned faculty preceptor and the fellows and housestaff assigned to the endocrine service. There are 2-3 teaching conferences each week.

**Didactic Activities**

Daily teaching rounds

Journal club (twice monthly)

Thyroid Multidisciplinary Conference (once monthly)

Citywide clinical case discussion (once weekly)

Core curriculum conference series (once weekly)

Scientific Research Conference (once monthly)

**Required Reading**

The endocrine section of one of the standard textbooks of medicine.

**Student Evaluations**

To receive a grade of Pass the student must successfully demonstrate proficiency of the learning objectives, attend all sessions, maintain a logbook of patients seen, and receive a passing evaluation from the preceptor.
MED645 Clinical Gastroenterology

Course Information

Course Director
Danielle E. Marino M.D.

Contact Person
Melissa Slusher Melissa_Slusher@URMC.Rochester.edu

Class Year Name
Clinical Gastroenterology

Class Code
MED645

Elective Tags
Consultation Service, Inpatient Service

Block Length
2 weeks

Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
ACF-4, Silver Elevators 4th Floor, front desk GI Division. Ask for GI consult fellow or page the GI-consult fellow on-call after 8am on Monday.

What time should students report?
8AM

Who should they report to?
GI consult fellow

Goal

Broad exposure to common GI and Liver diseases with focus on diagnostic evaluation and management, GI symptom evaluation, and GI emergency management, in both the outpatient and inpatient settings.

Learning Objectives

By the end of the rotation the student should be able to:
- Learn to identify those patients for whom gastroenterology or liver disease consultation may be beneficial both for acute care consultation and long term management.
- Learn how to provide optimal information in obtaining gastroenterology and liver disease consultation; learn how to facilitate a more successful consultation.
- Understand the pathophysiology of peptic ulcer disease in settings of H. pylori infection, acid hypersecretion, and use of injurious drugs (i.e. NSAIDs). Also learn the current approaches to diagnosis and treatment of these disorders.
- Learn the pathophysiology, clinical presentation, diagnosis, and inpatient treatment of major inflammatory bowel disorders.
- Understand the clinical presentation, risk factors, triage process, medical and endoscopic management of acute upper and lower gastrointestinal bleeding.
- Understand the pathophysiology, diagnosis, and treatment of common liver diseases including viral hepatitis, fatty liver disease, autoimmune liver disease, sclerosing cholangitis, and PBC.
- Review the clinical presentation, etiology, differential diagnosis, and inpatient management of acute on chronic abdominal pain.

- Review the clinical presentation, etiology, differential diagnosis, and inpatient management of acute diarrhea.

- Learn the indications for proper use of endoscopic procedures including EGD, colonoscopy, flexible sigmoidoscopy, ERCP, and endoscopic ultrasound in gastrointestinal practice.

- Review and strengthen those areas of physical diagnosis pertaining to gastroenterology.

- Learn diagnosis and management of acute and chronic pancreatitis and their complications

**Schedule of Activities**

Students will be assigned predominantly to the inpatient GI/Hepatology consultation service at Strong Memorial Hospital. Any student who is interested in having exposure to outpatient GI/Hepatology clinics can contact the course directors to arrange for this in advance. Activities are generally from 8 a.m. to 5 p.m., Monday thru Friday. There are no on-call responsibilities and no weekend rounds.

Students should page the on-call GI fellow at 8am on the first morning of their rotation or arrive on AC4 in the GI fellow’s room. Students will be assigned to evaluate new inpatient consultations, formulate a differential diagnosis and initial management plan. This should be reviewed with the GI fellows on consult service and then should be presented on daily rounds with the GI attending.

**Didactic Activities**

Students will attend the formal didactic lectures of the Strong Memorial Hospital Gastroenterology division. The following are the weekly GI/Hepatology conferences which the students are highly encouraged to attend alongside the GI fellows and attendings:

Monday @ noon: Guidelines review (AC4 conference room) or Pathology conference (Ground floor Pathology Department) or Research Conference or Hepatology Conference (AC4 conference room)

Wednesday @ 7am: GI Clinical Conference (AC2 conference room)

Wednesday @ noon: Board Review or GI Clinical Case Conference or IBD Case Conference or Motility Conference (AC4 conference room)

Thursday @ 7am every other month: Physician Morbidity & Mortality Conference (AC2 conference room)

Last Thursday of every month at 7am: IBD LIVE- teleconference with other IBD centers throughout the country (AC4 conference room)

Thursday @ noon: Liver Pathology (1st Thursday of the month; WCC 2-0727) or Journal Club (AC4 conference room) or Radiology Conference (AC4 conference room) or Board Review (AC4 conference room) or Pancreaticobiliary Conference (AC4 conference room)

Students will also participate in once weekly 30-minute interactive teaching sessions led by an upper level (off-service 2nd year) fellow, usually done on Friday. These sessions will be dedicated to working through a case, which will expand on a high-yield inpatient GI topic. The details of the case will be provided to the fellow leading the session. The goal of this case-based session is to create an interactive dedicated teaching experience that serves as a learning opportunity for the medical students, residents and fellows.

*Students are asked to touch base with the second year GI fellows via email at the beginning of their rotation to discuss timing and location of these sessions, which will generally be on Tuesday and Friday afternoon, as there are no other conferences scheduled on these days. The fellows on consult service can provide you with the names of the second year fellows to email.

Files are located on the GI network I drive, to be accessed during the session, not beforehand:
A case of abnormal LFTs

A case of diarrhea

Students may also be asked to make brief didactic presentations on clinical rounds pertinent to patients they are following. These will be assigned by the on-service GI attending or fellows.

**Required Reading**

**Suggested Reading**

The GI and Liver section of Cecil's Essentials of Internal Medicine is an excellent foundation for a broad overview of the field. Students may utilize more specific in-depth resources when reading more focused and selected topics pertaining to their patient encounters, such as Harrison's Principles of Internal Medicine, or Sleisenger and Fordtran's Gastrointestinal and Liver Disease.

**Additional Resources**

GI/Hepatology societal practice guidelines provide a comprehensive reference for diagnosis and management of a variety of conditions which will be encountered throughout the rotation. Students may wish to review recommendations pertinent to cases they encounter on the rotation. It is important to note that these guidelines are written for the level of understanding of a practicing gastroenterologist and that students of this course are not expected to fully master these guidelines.


AGA Guidelines: http://www.gastro.org/guidelines


An excellent on-the-go resource of high-yield topics is Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine (Pocket Notebook) by Marc S. Sabatine MD MPH

Students may also look at Blackboard for additional resources which will be added over time.

**Student Evaluations**

Students are favorably evaluated for their enthusiasm, interest, sense of responsibility, preparedness, and demonstrated capacity to present an organized history, exam, and assessment of clinical consultations. The GI fellows are integral to formulating student evaluations.
MED649 Clinical Gastroenterology

Course Information

Contact Person
Stephanie Green, 922-5133, stephanie.green@rochesterregional.org
Class Year Name
Clinical Gastroenterology
Class Code
MED649
Elective Tags
Patient Care
Block Length
2 - 4 weeks Contact for Approval
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Room B5010 - Rochester General Hospital
What time should students report?
8:30 to 8:40 a.m.
Who should they report to?
Bernie Porter, NP/Marcy Soprano, NP

Goal

To increase the student's familiarity with gastrointestinal, hepatic, and nutritional diseases.

Learning Objectives

By the end of the rotation the student should be able to:

GENERAL:
Be able to evaluate patients with common gastrointestinal symptoms.
Develop a familiarity with the common drugs used in gastrointestinal disease, both prescription and over-the-counter, understand their action, the situations for which they are used, their potential side effects, and their cost to the patient.
Become aware of the spectrum of procedures performed by a gastroenterologist, and understand the indications, alternatives and potential complications of each.
Identify patients/clinical situations for whom/which consultation with a gastroenterologist is indicated.

SPECIFIC:
Develop a reasonable diagnostic approach to both the acute and chronic gastrointestinal bleeder.
Become familiar with the treatment of gastroesophageal reflux disease and peptic ulcer disease.
Be aware of the populations at risk for colon cancer, and the manner in which they are screened.
Discuss the clinical and serologic features of viral hepatitis.
Learn the differential diagnosis of chronic liver disease, and develop a methodical approach to the evaluation of abnormal liver function tests.
Develop an approach to the patient with acute or chronic abdominal pain.
Understand the mechanisms of diarrhea, and how to evaluate patients with this symptom.
Become familiar with the clinical features of inflammatory bowel disease, the methods of evaluation, and the available therapy.
Understand the objectives of nutrition support, including nutrition assessment and development of both enteral and parental nutrition prescriptions.

Schedule of Activities

Students are assigned to the Gastroenterology Unit at Rochester General Hospital from 8:30 am to 5:30 pm on weekdays. They work with three attending gastroenterologists and participate in the out- and in-patient consultative service. Students observe gastrointestinal procedures including diagnostic and therapeutic upper and lower endoscopy, ERCP and liver biopsy. They have the opportunity to attend the daily noon conferences in the Department of Medicine for the residents, as well as Medical Grand Rounds on Thursday at 8:30.

Didactic Activities

Each patient seen is discussed with an attending, and independent reading about these patients is expected. Selected pathology slides will be reviewed with the pathology department. The student will be expected to give a weekly, 20-minute presentation on a topic pertaining to a patient seen that week. They are encouraged to attend the monthly Gastroenterology clinical conference when it is given during the time they spend on this elective.

Required Reading

Selected review articles will be provided to the student. All the texts listed are available in the Gastroenterology Unit and in the medical library.

Student Evaluations

To receive a passing evaluation, the student must present a weekly conference. In addition, through patient assessments, case presentations and write-ups, they will demonstrate to their preceptors that they have gained the knowledge stated in the objectives.
Course Information

Course Director
Thomas J. Fountaine M.D.
Contact Person
Dina Henchen 275-4797 Dina_Henchen@urmc.rochester.edu
Class Year Name
Hematology
Class Code
MED653
Elective Tags
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care
Block Length
2 or 4 weeks
Students
1
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Student Fellow, Visiting
Where should students report?
Variable. This information will be provided to the students upon registration.
What time should students report?
8 a.m.
Who should they report to?
Thomas Fountaine, MD

Goal

Students will become familiar with both malignant and benign diseases of the blood. Students will be encouraged to consider a career in hematology and to develop an interest in cancer research.

Learning Objectives

At the end of the elective the student will be able to:

1. Interpret peripheral blood smears and bone marrow morphology.
2. Describe the significance of disturbances in blood counts
3. Describe the rationale for ordering tests for bleeding and thrombotic disorders
4. Interpret tests for bleeding and thrombotic disorders
5. Explain the management of bleeding and thrombotic disorders
6. Demonstrate history and physical taking skills in the evaluation of patients with bleeding disorders and thrombotic conditions
7. Demonstrate history and physical taking skills in the evaluation of patients with lymphadenopathy or paraproteinemia

8. Discuss a rational approach to the diagnosis and treatment of cytopenias, such as anemia, thrombocytopenia, pancytopenia.

9. Discuss appropriate use of hematopoietic growth factors such as erythropoietin, granulocyte colony stimulating factor, etc.

10. Explain the appropriate use of blood products and the work up of various transfusion reactions.

**Schedule of Activities**

This elective is two to four weeks in length. The student will begin work at 8 a.m. daily under the supervision of the attending on the inpatient hematology service. The student will participate in daily rounds, didactic sessions as assigned and will attend two outpatient hematology clinics per week. Students may also be assigned to see hematology consults.

**Didactic Activities**

The student will attend the lymphoma pathology conference on Tuesdays at 12:30 p.m. in 2.0727, the leukemia and myeloma conference on Wednesdays at noon in 2.3601. The student will also attend the Fellowship Teaching Conference held on select Thursdays at 7:30 a.m. in 2.0727 and the Fellows Core Competency Conference on Fridays at 8 a.m. in 3.0809.

**Required Reading**

Selected articles as assigned by Dr. Huston at the outset of the elective rotation.

**Student Evaluations**

To receive a passing grade, students must attend all clinical and didactic activities. They will also make a short presentation to the hematology attending and team. Students must also receive a satisfactory evaluation from the course director and return their course evaluations prior to grades being posted.
MED654 Clinical Hematology

**Course Information**

Course Director  
Ronald Lewis Sham M.D.

Contact Person  
Nancy Rosenberg at 922-5387 email nancy.rosenberg@rochesterregional.org

Class Year Name  
Clinical Hematology

Class Code  
MED654

Elective Tags  
Inpatient Service

Block Length  
2

Students  
1

Prerequisites  
MED300 Medicine Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes

Available to the following medical students:  
3rd Year, 4th Year

Where should students report?  
Lipson Cancer and Blood Center, Lobby Level Room A1500

What time should students report?  
8:15 am

Who should they report to?  
Ronald Sham, M.D.

**Goal**

To understand the pathophysiology underlying common hematologic disorders and to develop a problem-oriented approach to the diagnosis and management of blood disorders.

**Learning Objectives**

By the end of the rotation the student should be able to:
- Formulate an accurate differential diagnosis for most common hematologic problems
- Interpret peripheral blood smears
- Have an understanding of disorders of hemostasis and thrombosis
- Utilize hematology laboratory studies in a rational manner

A two week block will be enough to acquire basic skills. Students seeking in-depth study should arrange a four to six week block.

**Schedule of Activities**

Students will be expected to participate in daily in-patient rounds and will see outpatients with a preceptor five days a week. Bone marrow conferences with the hematopathologist are held twice a week and multi-
disciplinary comprehensive Hemophilia Clinics once a month. An effort will be made to expose the student to as many different types of common hematologic problems as possible.

**Didactic Activities**

Teaching occurs for the most part in the context of inpatient and outpatient cases seen during the clerkship. Students will be expected to present cases to the preceptor and to other students/residents on the service. The preceptor will help direct the student to the relevant literature. Students are expected to attend a weekly conferences including bone marrow conference, Hemophilia conferand and X-Ray conference.

**Required Reading**

Each student will receive guidance regarding reading related to hematologic problems.

**Student Evaluations**

To achieve a grade of satisfactory, students must participate in the majority of the unit’s activities outlined above and demonstrate to the preceptor that they have achieved the learning objectives.
MED655 Medical Oncology

Course Information

Course Director
Thomas J. Fountaine M.D.
Contact Person
Dina Henchen 275-4797 dina_henchen@urmc.rochester.edu
Class Year Name
Medical Oncology
Class Code
MED655
Elective Tags
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care
Block Length
2 or 4 weeks
Students
1
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Variable. This information will be provided to the students upon registration.
What time should students report?
8 a.m.
Who should they report to?
Thomas Fountaine, MD

Goal

Students will become familiar with common cancers. Students will be encouraged to consider a career in medical oncology and to develop an interest in cancer research.

Learning Objectives

At the end of the elective the student will be able to:

1. List the signs and symptoms of common cancers and describe their diagnostic evaluation and natural history.
2. Discuss the principles of cancer therapy including chemo-, hormonal-, and biologic-therapy.
3. Explain the management of common complications of therapy including myelosuppression, infection, hemorrhage, nausea, vomiting, and renal and cardiac failure.
4. Explain the treatment of oncologic emergencies; such as febrile neutropenia, spinal cord compression, and metabolic abnormalities such as hypercalcemia.
5. Discuss the management of cancer-related pain and the use of narcotic analgesics and adjunctive medications.
6. Discuss the long term complications of cancer and its therapy.
7. Discuss the role of clinical trials in a clinical cancer setting.
8. Demonstrate history and physical taking skills in the evaluation of patients with cancer

**Schedule of Activities**

This elective is two to four weeks in length. The student will begin work at 8 a.m. and will attend a variety of outpatient medical oncology clinics. Students may also spend time seeing select inpatient consults with the inpatient attending physician.

**Didactic Activities**

Students will attend the breast oncology pathology conference at 7:30 a.m. on Mondays in 2.0727, the breast oncology didactic conference at noon on Wednesdays in 2.0727 or the genitourinary oncology conference on the first and third weeks each month at noon in G.5307, the fellowship teaching conference on some Thursdays at 7:30 a.m. on 2.0727, the thoracic oncology conference at 4 p.m. Thursdays in 2.0727, the gastrointestinal oncology conference at 7:30 a.m. on Fridays in 2.0727 or the fellowship core competency conference at 8 a.m. Fridays in 3.0809.

**Required Reading**

Selected articles as assigned by Dr. Huston at the outset of the elective rotation.

**Student Evaluations**

To receive a passing grade, students must attend all clinical and didactic activities. They will also make a short presentation to the oncology attending physician and team. Students must also receive a satisfactory evaluation from the course director and return their course evaluations prior to grades being posted.
**Course Information**

Course Director  
Thomas J. Fountaine M.D.  
Contact Person  
Dina Henchen 275-4797 dina_henchen@urmc.rochester.edu  
Class Year Name  
Individualized Hematology/Medical Oncology  
Class Code  
MED656  
Elective Tags  
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care  
Block Length  
2 or 4 weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
4th Year, Visiting  
Variable. This information will be provided to the students upon registration.  
What time should students report?  
8 a.m.  
Who should they report to?  
Thomas Fountaine, M.D.

**Goal**

The prerequisite for this course is either MED 653 or MED 655.

This elective is intended for fourth year medical students who have already taken MED 653 or MED 655. It offers the chance for the development of an in-depth learning experience for students who wish to focus their learning on a particular hematologic or oncologic disease family.

**Learning Objectives**

To be discussed with the course director upon registration.

**Schedule of Activities**

To be discussed with the course director upon registration.

**Didactic Activities**

To be discussed with the course director upon registration.

**Required Reading**

MED656 Individualized Hematology/Medical Oncology
To be discussed with the course director upon registration.

**Student Evaluations**

To be discussed with the course director upon registration.
**Course Information**

Course Director  
Ummara H. Shah M.D.  
Contact Person  
Rachel Climer 275-9146, rachel_climer@urmc.rochester.edu  
Class Year Name  
Clinical Immunology  
Class Code  
MED658  
Elective Tags  
Inpatient Service, Outpatient Service, Patient Care  
Block Length  
2 weeks  
Students  
1  

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  

Available to the following medical students:  
3rd Year, 4th Year, Visiting  

Where should students report?  
SMH RM 5-6220N for orientation followed by RM 5-6220I for further instructions. Must be in contact with Rachel Climer before reporting.  

What time should students report?  
10:30am on morning of elective start  

Who should they report to?  
Dr. Ummara Shah for orientation followed by Rachel Climer for further instructions  

**Goal**

To provide a solid foundation in Allergy/Immunology and Rheumatology which will allow the student to approach the patient with allergic or musculoskeletal complaints in an organized and efficient manner.

**Learning Objectives**

By the end of the rotation the student should will:  
- Develop an understanding of the diagnostic criteria for rheumatoid arthritis, osteoarthritis, crystal induced arthritis, systemic lupus erythematosus, seronegative spondyloarthropathies, fibromyalgia, septic arthritis, allergic rhinitis and asthma.  
- Develop an understanding of synovial fluid analysis and its use in diagnosis and management of acute and chronic arthritis.  
- Develop skills in interpreting bone radiographs and understand the radiographic features of rheumatoid arthritis, osteoarthritis, gout, psuedogout, and seronegative spondyloarthropathies.  
- Develop an understanding of the use of immunologic laboratory studies in the diagnosis and management of patients with autoimmune diseases.  
- Develop an understanding of the indications for and potential side effects of commonly used medications such as NSAIDs, hydroxycholoroquine, sulfasalazine, methotretexate, azathioprine, cyclophosphamide, etanercept, infliximab, leflunomide, corticosteroids, colchicine, probenecid, and allopurinol.  
- Develop an understanding of the role of physical and occupational therapy in the treatment of musculoskeletal problems.
-Develop an understanding of the indications, contra-indications, and techniques of arthrocentesis.
-Develop an understanding of allergic diseases, asthma and the differential diagnosis of wheezing, nasal congestion and rhinorrhea.
-Develop experience in taking a complete environmental history and in advising patients regarding techniques to reduce exposure to house dust mite, mold, and animal antigens.

## Schedule of Activities

Students will be assigned to an ambulatory office practice for up to 4 half days per week. Students will also be encouraged to evaluate selected inpatients who are being followed by the inpatient service. Students will attend the Division conferences.

## Didactic Activities

Students are required to attend all AIR conferences which include Thursday morning Clinical Conferences, Case Conundrum, Radiology Conference & Journal Club.

## Required Reading

Students are required to complete a Blackboard self-study course, AIR.MS .2011-2012.

## Student Evaluations

The standard Medical School Evaluation will be used
**Course Information**

Course Director
Edward Epes Walsh M.D.
Contact Person
Edna Fernandez, 922-4003, edna.fernandez@rochesterregional.org
Class Year Name
Elective in Infectious Diseases
Class Code
MED660
Elective Tags
Inpatient Service, Patient Care
Block Length
2-4 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Rochester General Hospital, Room R209
What time should students report?
8:30 am
Who should they report to?
Edna Fernandez

**Goal**

Students should develop greater familiarity with infectious agents and their clinical presentation, host-parasite relationships, use of the diagnostic microbiology laboratory and antibiotic chemotherapy.

**Learning Objectives**

By the end of the rotation the student should be able to:

- Recognize common bedside and laboratory findings that point to a possible infectious disease etiology of disease in the hospitalized patient.
- Order and properly interpret diagnostic laboratory tests used in the evaluation of patients for whom an Infectious Disease Service consultation is requested. These include a variety of conventional viral, bacterial, and fungal culture and serologic methods.
- Make rational drug choices among families of antimicrobial and antiviral agents for the treatment of infectious diseases and to recognize potential allergic and toxic side effects and their management.
- Discuss the mechanisms of host defense against infectious agents in normal and immunocompromised patients.
- Discuss common problems in hospital epidemiology and infection control.
Course Information

Course Director
Peter R. Mariuz M.D.
Contact Person
Shawn Sciascia 275-7665
Class Year Name
HIV Outpatient Care
Class Code
MED662
Elective Tags
Consultation Service, Outpatient Service, Patient Care
Block Length
2 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Infectious Diseases Clinic AC-3; silver elevator to 3rd floor. ID is the last Clinic.
What time should students report?
8:30 AM
Who should they report to?
Shawn Sciascia

Goal

To develop an understanding of HIV ambulatory care, the diagnostic challenges of HIV related complications, the psycho-social impact of HIV disease, and relevant issues around HIV prevention.

Learning Objectives

By the end of the rotation the student should be able to:

Describe the current recommendations for prophylaxis of opportunistic infections.

List the different options for treatment of pulmonary pneumocystosis.

List currently approved antiretrovirals, and discuss their uses and side effects.

Discuss use of antiretrovirals for prevention of vertical transmission of HIV.

Describe the initial work-up of HIV-infected individuals, including guidelines for interpretation of tuberculin skin tests.

Discuss strategies to improve the patient's adherence to medications.

Identify patients for whom psychiatric consultation is indicated.
MED665 Infectious Diseases

**Course Information**

Course Director  
Paul S. Graman M.D.

Contact Person  
Wendy Lepsch 275-5873, Wendy_Lepsch@URMC.Rochester.edu  
AnnMarie Crist 275-6558, AnnMarie_Crist@URMC.Rochester.edu

Class Year Name  
Infectious Diseases

Class Code  
MED665

Elective Tags  
Consultation Service, Inpatient Service, Patient Care

Block Length  
2 weeks

Students  
2

Prerequisites  
MED300 Medicine Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes

Available to the following medical students:  
4th Year, International Visiting, Visiting

Where should students report?  
Infectious Disease Division Office Room 3-6209

What time should students report?  
9:00 AM

Who should they report to?  
AnnMarie Crist

**Goal**

To understand the principles of diagnosis and treatment of infectious diseases, including familiarity with culture and susceptibility tests, and use of antimicrobial agents.

**Learning Objectives**

By the end of the rotation the student should be able to:

Discuss pathogenesis of common infections, including cellulitis, pneumonia, bacteremia, UTI, and tuberculosis.

Distinguish between infection, colonization, and contamination.

Interpret results of cultures and gram stains from various sites, including sputum, urine, blood, CSF, and wounds.

Interpret results of antibiotic susceptibility testing, and apply these results in the selection of appropriate antibiotic therapy. Define minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC).
Discuss pharmacology, toxicity and spectrum of commonly used antibiotics.

Evaluate a patient with fever of uncertain etiology.

**Schedule of Activities**

Students work closely with Fellows, Medical Residents, and Attendings on the Infectious Disease in-patient service at SMH. Students will be assigned new patient consultations for work-up in conjunction with a Fellow or Resident; students will write up, present and discuss these cases on ID Attending Rounds.

**Didactic Activities**

- Students are expected to read about and discuss patient cases with their preceptors.
- Students should attend ID Clinical Conference (Thursdays 11:30-1:00) and ID City-Wide Conference (last Thursday of month 8:00-9:30).
- Students are welcome to attend other conferences including HIV Conference (Mondays 12:00-1:00), ID Journal Club (2nd and 4th Wednesdays 12:00-1:00), and ID Seminar Series (Fridays 8:00-9:00).
- Students may be assigned to present one of their patient cases at ID Clinical Conference.

**Required Reading**

Principles and Practice of Infectious Diseases, Bennett, Dolin and Blaser. 8th ed., 2015 (selected chapters).

**Student Evaluations**

In order to receive a grade of Pass, students must: 1) demonstrate an appropriate knowledge of the learning objectives, 2) actively participate in rounds, patient care, and conferences, and 3) complete patient work-ups at a level commensurate with their experience.
**Course Information**

Course Director  
Rebeca Denise Monk M.D.  
Contact Person  
Marilyn Miran 275-1554 marilyn_miran@urmc.rochester.edu  
Class Year Name  
Clinical Nephrology  
Class Code  
MED670  
Elective Tags  
Inpatient Service, Outpatient Service, Patient Care  
Block Length  
2-4  
Students  
2  
Prerequisites  
(ALL) MED300 Medicine Clerkship, TYC300 Third Year Comprehensive Assessment  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
4th Year, Visiting  
Where should students report?  
On first day Students should report to room 3-6324 and ask the secretary to page the fellow on acute service for direction.  
What time should students report?  
8:30 am.  
Who should they report to?  
Nephrology Fellow on Acute service

**Goal**

An elective experience designed for 4th year Medical students to gain experience in clinical nephrology, the student is expected to achieve competence in the diagnosis and management of common problems in nephrology including acute and chronic kidney disease as well as acid-base and electrolyte disturbances.

**Learning Objectives**

By the end of the rotation the student should be able to:  
- Present data on new patients to the team and generate a consult note on new patients.  
- Provide excellent daily follow-up on several patients on the team.  
- Generate an appropriate differential diagnosis for patients with acute kidney disease.  
- Use appropriate diagnostic tools to differentiate between pre-renal and intrinsic renal disease.  
- Do a urinalysis and become familiar with common findings seen.  
- Diagnose and manage common electrolyte and acid-base disorders.  
- Understand the rationale for prescribing standard medications used in patients with chronic kidney disease.  
- Become familiar with the work-up of patients with proteinuria and hematuria.  
- Become familiar with common disorders of calcium and phosphorus balance, and nephrolithiasis.
Schedule of Activities

Students are assigned to SMH and work on the inpatient units with the acute consult team which consists of an attending, a Nephrology fellow and occasionally internal medicine residents. Essential outpatient experience is obtained in the Tuesday afternoon and Friday morning general nephrology clinics.

Didactic Activities

There is a monthly clinical conference presented by a fellow, renal pathology conference twice/month, weekly journal club, a weekly sign-out conference in which all of the complex and interesting inpatients on the service are discussed. Other seminars of interest are the weekly journal club, biweekly physiology conference and biopsy conference which students are welcome to attend.

Required Reading

Case relevant material

Student Evaluations

A narrative evaluation is completed with comments regarding the student's knowledge, clinical skills, problem-solving and clinical reasoning abilities, communication skills and personal and professional qualities, including dependability, motivation and interpersonal relationships during the rotation.
**Course Information**

Course Director  
Marvin Grieff M.D.  
Contact Person  
Patricia Read, 922-0402, patricia.read@rochesterregional.org  
Class Year Name  
Elective in Nephrology  
Class Code  
MED671  
Elective Tags  
Consultation Service, Inpatient Service  
Block Length  
2 weeks  
Students  
1  
Prerequisites  
MED300 Medicine Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  
Available to the following medical students:  
3rd Year, 4th Year  
Where should students report?  
Rochester General, Room B5005. Nephrology has moved off-site to 370 E. Ridge Rd, Ste 20, NE corner of E. Ridge Rd & Seneca Ave. 922-0402 is my direct extension for further instructions and/or questions  
What time should students report?  
9:00 am  
Who should they report to?  
Patricia Read/ Lisa Phillipson

**Goal**

To understand the basic concepts of renal diseases, acid-base and fluid balance.

**Learning Objectives**

By the end of the rotation the student should be able to:  
? Identify patients for whose management a nephrology consultation is indicated and learn how to perform the consultation.  
? Explain the difference between acute and chronic renal disease, and the general correlation between different patterns of urinalysis sediment findings and certain disease states.  
? Define the different types of proteinuria, and define the mechanism of nephrotic syndrome.  
? Learn the major causes of acute renal failure and to distinguish between prerenal disease, acute tubular necrosis and obstructive uropathy.  
? Learn the use of urinary sodium concentration and the fractional excretion of sodium to distinguish between prerenal states and acute tubular necrosis as a cause of acute renal failure.  
? Know the major glomerular syndromes (nephritic and nephrotic) and their clinical presentation. Discuss the mechanisms responsible for immune mediated glomerular injury, vasculitis, and how they affect the structure and function of the kidney. Discuss the progression of chronic renal failure and the adaptive responses to loss of functioning nephrons.  
? Discuss the mechanisms by which uremic symptoms are produced, the role of parathyroid hormone and
Vitamin D in chronic renal insufficiency and erythropoietin in Renal anemia.

?Describe the indications for dialysis both in acute and chronic renal failure.

?Discuss the mechanisms of sodium retention in edema states and how to use diuretics in the treatment of sodium retention.

?Discuss the factors which determine the plasma sodium concentration, and the mechanism and treatment of hypo and hypematremia.

?Discuss the factors involved in the regulation of potassium balance, the major causes of hyper and hypokalemia and the physiological principles of therapy for hyperkalemia.

?Explain the basic principles of acid base physiology, the characteristics of different acid base disorders and the rational treatment of metabolic acidosis and metabolic alkalosis.

**Schedule of Activities**

The students assigned to the Rochester General Hospital Nephrology Unit will work with the consulting nephrologists from 8:30 a.m. to 5:30 p.m. on weekdays. The students will be assigned new patient consultations, usually one per day and will follow these patients during the elective. The students will also see new patients in the outpatient nephrology clinic, and on follow-up visits. The student will perform the initial evaluation under the direct supervision of the consulting nephrologists. Urinalysis will be performed by the student under the guidance of a nephrologist on each new consultation.

**Didactic Activities**

Students will be assigned a preceptor (different from the consulting nephrologists). This preceptor will discuss the learning objectives with the students. The student will participate in all the clinical conferences of the nephrology unit. Each student will be assigned a specific nephrological problem, based on material seen on the wards. This will be researched and presented to the nephrology group at the clinical conference. In addition, the students are expected to attend resident conferences and the RGH medical grand rounds each week.

**Required Reading**


**Student Evaluations**

To receive a grade of pass, students must perform adequate, work-ups to the preceptor, participate in the clinical conference and must receive a satisfactory clinical evaluation from the consulting nephrologists.
MED673 Elective in Nephrology

Course Information

Course Director
Craig Bennett Kaplan M.D., M.A.
Contact Person
Virginia Petrillo 341-6895 Christine_Carrier-Gray@urmc.rochester.edu
Class Year Name
Elective in Nephrology
Class Code
MED673
Elective Tags
Research-Clinical, Teaching
Block Length
4 - 6 weeks Must contact Dept. For Approval
Students
1
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Highland Hospital Nephrology Office Physician`s Office Building Suite 030
What time should students report?
8:30am
Who should they report to?
Christine Carrier-Gray

Goal

To understand the principles of evaluation and management of acid base, fluid electrolyte, and nephrologic problems.

Must get course director’s approval prior to scheduling

Learning Objectives

By the end of the rotation the student should be able to:
1. Perform a urinalysis, identify chemical and microscopic components accurately, and apply this finding to the clinical setting in formulating a differential diagnosis.
2. Interpret arterial blood gases, plasma and urine anion gap, and evaluate and formulate a specific treatment plan for simple and mixed acid base disturbances.
3. Evaluate and formulate a specific treatment plan for fluid and electrolyte disturbances utilizing clinical and blood and chemistry results (osmolality, fractional excretion).
4. Evaluate timed urinary collections for creatinine and protein.
5. Know the appropriate workup and differential diagnosis of clinical problems including hematuria, proteinuria, and renal failure.
6. Discuss the management of acute renal failure and chronic renal failure.

Identify the features of glomerulonephritis and list the main histologic types and primary and secondary etiologies for these.
Describe the effects of certain drugs (antibiotics, non-steroidal anti-inflammatory drugs) on the kidney. 
Identify patients/situations that require consultation with a nephrologist. 
Describe the principles of dialysis and the modalities available to treat patients with end-stage renal disease. 
Evaluate patients presenting with nephrolithiasis and describe reasons to consider workup to rule out secondary hypertension. 
Discuss primary and secondary hypertension and describe reasons for and plans for workup of secondary causes.

**Schedule of Activities**

All activities are at Highland Hospital where students will work under the guidance and supervision of the four faculty nephrologists. They will participate in inpatient hospital rounds and evaluate inpatient and outpatient consults.

**Didactic Activities**

Students will participate in nephrology subspecialty conferences and journal clubs. They will be expected to independently evaluate clinical problems and formulate and discuss differential diagnosis, workup and treatment plan with the attending nephrologist.

**Required Reading**

   *All resources can be borrowed from the Nephrology Department library at HH.*

**Student Evaluations**

To receive a grade of pass, the student must participate in daily rounds taking an active role in patient evaluation and care. They must turn in a documented log sheet that learning objectives were met and they must complete and pass the written nephrology exam given at the end of the course. The latter will be reviewed with the student to identify weaknesses and clarify understandings.
**Course Information**

Course Director  
Ronald Lewis Sham M.D.  
Contact Person  
Nancy Rosenberg at 922-5387 email: nancy.rosenberg@rochesterregional.org  
Class Year Name  
Clinical Oncology  
Class Code  
MED684  
Elective Tags  
Inpatient Service  
Block Length  
2 weeks  
Students  
1  
Prerequisites  
MED300 Medicine Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  
Available to the following medical students:  
3rd Year, 4th Year  
Where should students report?  
Lipson Cancer and Blood Center, Lobby Level  
What time should students report?  
8:15 a.m.  
Who should they report to?  
Ronald Sham, M.D.  

**Goal**

The student should be able to understand the database necessary to be gathered and the decision making criteria to consider in evaluation and treatment of patients with cancer.  

**Learning Objectives**

By the end of the rotation the student should be able to:  
Perform a history with specific attention to areas concerning diagnosis (family history, environmental exposures, history of present illness) and physical examination directed to skin, lymph nodes, breast, liver, spleen, and tumor measurements.  
Become aware of the major oncologic emergencies such as spinal cord compression, tumor lysis syndrome, hypercalcemia and understand the principles of managing these conditions.  
Interact with other members of the multimodality oncologic team: radiation and surgical oncology, nursing, social work.  
Assess performance status and estimate the short and long-term toxicities of chemotherapy regimens.  

**Schedule of Activities**

Student will participate in outpatient office evaluation of patients with a wide range of malignant diseases.
The student will evaluate out-patients and inpatients under the direct supervision of a faculty attending.

**Didactic Activities**

There are three scheduled conferences per week at which the student will learn about radiographic and pathologic evaluation of patients. There are also case-based didactic sessions after clinics.

**Required Reading**

Articles and Texts recommended during elective.

**Student Evaluations**

The student will be evaluated by direct observation of the student's skills at taking a history, physical and problem solving.
MED686 Multidisciplinary Oncology in Radiation Oncology

**Course Information**

Course Director  
Kenneth Y. Usuki M.D.  
Contact Person  
Michelle Crary / 3-1984 / michelle_crary@urmc.rochester.edu  
Class Year Name  
Multidisciplinary Oncology in Radiation Oncology  
Class Code  
MED686  
Elective Tags  
Multidisciplinary, Outpatient Service  
Block Length  
2 - 4 weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Department of Radiation Oncology waiting Room G-0850A, ask receptionist to call Michelle at 3-1984  
What time should students report?  
7:45 a.m.  
Who should they report to?  
Michelle Crary

**Goal**

To provide students with an understanding of cancer management in a multidisciplinary setting with an emphasis on clinical radiation oncology.

**Learning Objectives**

By the end of the rotation the student should be able to:  
* Discuss the natural history of malignant disease  
* Describe standard work-up and diagnostic tests used in the evaluation of new patients and in follow-up clinic.  
* Discuss staging of the disease and its relationship to development of a treatment plan.  
* Explain indications for delivering radiation therapy.  
* Discuss the process leading up to and including formulation of a treatment plan.  
* Describe integration of other standard therapeutic modalities (surgery and chemotherapy) in cancer management.  
* Identify various side effects associated with radiation therapy treatments and explain management techniques.

**Schedule of Activities**

Students are assigned to a radiation oncologist on a rotating basis at SMH from 8:00am - 5:00pm. Students will follow patients from consult through treatment with emphasis on all aspects of patient care, particularly on
diagnostic evaluation of new patients leading to accurate staging of disease and formulation of a treatment plan, often multidisciplinary in character.

**Didactic Activities**

- New Patient Conference - 1 hour per week  
- Treatment Planning Rounds - 1 hour per week  
- Rad Bio course - 1 hour per week  
- Physics course - 1 hour per week  
- Other educational opportunities dependant on the month/week

**Required Reading**

Clinical Oncology, 8 ed. By Philip Rubin, M.D. - major reference text.

**Student Evaluations**

To receive a grade of Pass, students must turn in all assigned case studies, attend new patient conferences and treatment planning rounds and receive a satisfactory clinical evaluation from their preceptors.
**Course Information**

Contact Person  
Ann Bauman 275-4861 ann_bauman@urmc.rochester.edu  
Class Year Name  
Inpatient Pulmonary Medicine  
Class Code  
MED692  
Elective Tags  
Inpatient Service  
Block Length  
2 or 4 weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year  
Where should students report?  
Please call or e-mail Ann Bauman a few days prior to the start of the rotation.  
What time should students report?  
TBD  
Who should they report to?  
TBD

**Goal**

At the end of this rotation, the student should be able to articulate the initial diagnostic approach to and management of patients with common respiratory problems such as asthma, COPD, interstitial lung disease and lung cancer. Other conditions likely to be encountered include obstructive sleep apnea, pulmonary hypertension, and unexplained dyspnea or hypoxemia. The student should also be familiar with basic pathophysiologic mechanisms of hypoxemia including the causes of a widened A-a gradient, and also principles of alveolar ventilation. Basic interpretation of the normal and abnormal chest X-ray will also be expected.

**Learning Objectives**

The student will accompany the inpatient Pulmonary Consult Team at Strong Memorial Hospital. The Consult Team consists of an Attending and Fellow that see 3-5 new consults per day with a variety of pulmonary diagnoses. An Internal Medicine Resident is also usually a part of the team during elective time. Consults vary in their acuteness from acute respiratory failure to lung cancer, and more chronic problems including cough and unexplained dyspnea. The student will initially accompany the team on rounds and observe the process of consultation from initial evaluation to write-up of recommendations. By the end of the rotation the student will be expected to see new consults independently and initiate his/her own diagnostic plan. The student will be expected to provide a 5-10 minute overview of evidenced based management of one of his or her cases twice per week on rounds (total of four presentations). The student will be expected to attend regularly scheduled conferences (e.g. City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference on Fridays at Noon), and will also have the opportunity to present an interesting case at these conferences. The student will also have the chance to observe fiberoptic bronchoscopies (e.g. bronchoalveolar lavage or transbronchial biopsies) since the Pulmonary Team also
performs this procedure on a regular basis. There may be limited possibilities to participate in outpatient Pulmonary clinic as well.

**Schedule of Activities**

Daily rounds five days per week on the pulmonary inpatient consults service. Bronchoscopies scheduled throughout the day beginning at 8 a.m. Depending on volume of service, rounds can conclude after 6 p.m.

**Didactic Activities**

Formal didactic sessions include City Wide Chest Conference on Wednesday morning, and Pulmonary Clinic Conference Fridays at noon. Informal teaching sessions as part of rounds.

**Student Evaluations**

Student’s performance will be graded by: (i) their participation in rounds and ability to complete a coherent consult write-up on a timely basis; (ii) direct observation of their clinical skills including history taking and physical exam; and (iii) their presentations on rounds or at conferences.
Course Information

Course Director
Michael E. Yurcheshen M.D.
Contact Person
Michael Yurcheshen, M.D.; 341-7575 Michael_Yurcheshen@urmc.rochester.edu
Class Year Name
Sleep Medicine Elective
Class Code
MED695
Elective Tags
Multidisciplinary, Outpatient Service, Patient Care
Block Length
1 - 2 weeks Must get approval.
Students
1
Prerequisites
(ALL) MED300 Medicine Clerkship, PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Must get course director’s approval prior to scheduling....Strong Sleep Disorders Center 2337 S. Clinton Ave
What time should students report?
8:30
Who should they report to?
Rhonda Westmiller, receptionist. Must Contact Dr. Yurcheshen before scheduling

Goal

To develop an understanding of the various sleep disorders and their treatment.

Learning Objectives

By the end of the rotation, the student should be able to:
· Take a comprehensive sleep history.
· Identify patients who likely suffer from a sleep disorder.
· Become cognizant of both the medical and societal cost of various sleep disorders.
· Be able to manage and counsel a patient suffering from obstructive sleep apnea.
· Be familiar with behavioral therapy in treating patients suffering from insomnia.
· Be able to describe the normal stages of sleep as well as the physiologic changes that occur during sleep.
· Describe the underlying physiology of obstructive sleep apnea.

Schedule of Activities

Students will rotate at the Strong Sleep Disorders Center of Rochester during their one or two-week elective. During this time, they will perform the initial evaluation on patients referred to the center. Many of these patients will suffer from obstructive sleep apnea, however, there is also exposure to patients with other sleep abnormalities such as narcolepsy, restless legs syndrome/periodic limb movements during sleep, and REM
behavior disorder. Medical students will also rotate in the insomnia clinic, where they will be exposed to behavioral therapy in the treatment of chronic insomnia.

**Didactic Activities**

Students are expected to read about and discuss the learning objectives with their preceptor during the clinical day. The consults that the medical students are involved in will be discussed on a one-to-one basis and teaching points will be made about each case.

**Required Reading**

- Current Concepts in Sleep Medicine by Peter Huari
- Principles and practices of Medicine by Kryger, Roth and Dement (selected chapters)
- Various articles from recent literature about sleep disorders
- These booklets will be provided to you at the beginning of your rotation.

**Student Evaluations**

To receive a grade of pass, students need to actively participate in the assessment and care of patients at the Sleep Disorders Center. They must also demonstrate an understanding of the learning objectives.
Course Information

Course Director
Jennifer K. Readlynn M.D.
Contact Person
Julie Bissonnette 275-3250 julie_bissonnette@urmc.rochester.edu
Class Year Name
Medicine Sub-Internship @ SMH
Class Code
MEDEX1
Block Length

Students
5
Prerequisites
MED300 Medicine Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
SMH
What time should students report?
8 am
Who should they report to?
Valerie Lang, MD

Learning Objectives
MEDEX3 Medicine Sub-Internship @ HH

Course Information

Course Director
Jennifer K. Readlynn M.D.

Contact Person
noreen roberts 341-0341 noreen_roberts@urmc.rochester.edu

Class Year Name
Medicine Sub-Internship @ HH

Class Code
MEDEX3

Block Length

Students
2

Prerequisites
MED300 Medicine Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Highland Hospital

What time should students report?
8:00 am

Who should they report to?
Dr. Kevin McCormick
MEDEX4 Medicine Sub-Internship @ Unity

Course Information

Course Director
Jennifer K. Readlynn M.D.

Contact Person
Natalie Placious 723-7746 nplacious@unityhealth.org

Class Year Name
Medicine Sub-Internship @ Unity

Class Code
MEDEX4

Block Length

Students
2

Prerequisites
MED300 Medicine Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Park Ridge Hospital Long Pond Road

What time should students report?
8 am

Who should they report to?
Philip Bonanni, MD
Course Information

Course Director
Marjorie Hodges Shaw J.D., Ph.D.

Contact Person
Chris Donnelly, 585-275-5800 christine_donnelly@urmc.rochester.edu

Class Year Name
Clinical Ethics

Class Code
MHU602

Elective Tags
Medical Humanities

Block Length
2 weeks

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Division of Medical Humanities and Bioethics, G-8011

What time should students report?
By arrangement with Chris Donnelly

Who should they report to?
Bernie Sussman

Goal

To learn the aspects of clinical ethics that are essential to good medical and surgical practice. This elective provides students the opportunity to participate in the clinical ethics consultation service, practice the skills necessary for discussing ethical dilemmas, reflect upon the evolution of clinical ethics and consider how personal and professional values influence the practice.

Learning Objectives

Capabilities the student is expected to acquire in this elective
1. Identify situations/cases in which ethics consultation is appropriate; identify the procedure for requesting an ethics consultation; describe who can request an ethics consultation
2. Demonstrate the process of reviewing the medical record in an ethics consultation; identify the relevant components of the medical record for an ethics consultation
3. Identify the relevant parties to be interviewed for the ethics consultation
4. Demonstrate the process of the ethics interview with patient, family, members of the care team, and others
5. Identify ethical issues presented in clinical cases
6. Recognize the major methodologies for analysis of ethical problems in clinical practice
7. Utilize the major methodologies to analyze clinical cases
8. Distinguish ethical, legal, and clinical issues
9. Analyze the special problems that exist in cases involving difficult and/or non-compliant patients or families
10. Demonstrate familiarity with the relevant bioethics literature, including major journals and books applying ethics to the field of interest of the student
11. Prepare written summaries of ethical issues in clinical cases, including analyses, recommendations, and
12. Identify and demonstrate the appropriate mechanisms for follow up in ethics consultation

**Schedule of Activities**

The schedule of teaching and clinical activities for the Ethics Consultation Service varies. Chris Donnelly, Secretary of the Division of Medical Humanities & Bioethics will send each student on elective a welcome email message and a schedule for the rotation.

**Didactic Activities**

The student is expected to be familiar with the learning objectives and requirements before beginning this elective experience. The student will attend all classes and teaching rounds conducted by the course directors. The student will participate in all ethics consultations during the elective experience, including follow up. Students will research the issues around a clinical ethics case and present the case to the ethics team for discussion.

**Required Reading**

Students enrolling in this elective should have access to a copy of Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine (8th Edition) by Jonsen, Siegler and Winslade. Resolving Ethical Dilemmas: A Guide for Clinicians (5th Edition) by Lo, available in the library or in the Medical Humanities office. Other bioethics literature, will be selected according to the current cases and student interest.

**Student Evaluations**

To receive a passing grade for this elective, the student will actively participate in the full activities of the ethics team. The student will contribute to discussions about cases and issues, and will participate in the preparation of written case summaries. Students will identify an issue in clinical ethics, research the literature and present the case to the clinical consult team for discussion.
Course Information

Course Director
Marjorie Hodges Shaw J.D., Ph.D.
Contact Person
Chris Donnelly, 585-275-5800 christine_donnelly@urmc.rochester.edu
Class Year Name
Clinical Ethics Research
Class Code
MHU603
Elective Tags
Medical Humanities
Block Length
2 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Division of Medical Humanities and Bioethics, G-8011
What time should students report?
Schedule with Margie Shaw
Who should they report to?
Margie Shaw

Goal

This elective includes two options for students interested in pursuing independent research in ethics. The goal of both options is to allow the third or fourth year student to identify an ethics topic of interest and conduct substantive independent research of that topic under the guidance of the ethics faculty.

If the student elects option one, the student will produce a manuscript quality paper with input from faculty. (Example of previous project: “End of Life Conflicts.”) This option gives the student the opportunity to identify an ethics topic of interest, critically survey the relevant ethics literature, develop an argument, hypothesis, or position, and develop this into a manuscript quality paper.

If the student elects option two, the student will produce an annotated bibliography of at least 20 articles on a selected topic and a 2-3 page reflection on what the student learned and how the research will influence future practice. This option gives the student the opportunity to identify an ethics topic of interest, critically survey the relevant ethics literature, summarize the literature in a useful form to facilitate additional learning, and publish this resource on the Division’s webpage.

For guidance on how to create an annotated bibliography, see http://guides.library.cornell.edu/annotatedbibliography.
Learning Objectives

The learning objectives include:
1. Acquisition of knowledge about literature in bioethics and the skills to conduct research on ethical issues.
2. Acquisition of knowledge, including self knowledge, about an ethical issue that affects the practice of medicine and the medical profession.
3. The ability to provide a framework to structure the issues in such a way to facilitate ethical decision-making.

Schedule of Activities

One Week before beginning the elective the student must meet with Dr. Shaw to get approval of a topic and decide whether to complete option one or option two.

Once you have approval and before the first day of the elective, please send Chris Donnelly (christine_donnelly@urmc.rochester.edu) the title of your project, the option you selected, and the date on which you will submit your final project.

Didactic Activities

The student will conduct library research and either write a paper or create an annotated bibliography, as described.

Required Reading

To be determined in the course of the research.

Student Evaluations

To receive a Pass grade, the student must attend all scheduled meetings and meet all deadlines.
Course Information

Course Director
Erin Denney-Koelsch MD
Contact Person
Gina Caquias 275-7987 Gina_Caquias@urmc.rochester.edu

Class Year Name
Palliative Care
Class Code
MHU604
Elective Tags
Inpatient Service

Block Length
2 weeks (exceptions will be considered on a case-by-case basis)

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Prior to elective start date, student will receive an e-mail with their schedule, reporting location, syllabus, etc.

What time should students report?
see above

Who should they report to?
see above

Goal

PLEASE NOTE: THIS ELECTIVE IS AVAILABLE FOR 4th YEAR MEDICAL STUDENTS.

IF YOU ARE A 3rd year medical student wishing to register, we encourage you to contact our office in advance to discuss prerequisites.

Elective Objective is to learn the elements of palliative care which are essential to good medical and surgical practice.

Learning Objectives

Capabilities the student is expected to acquire in this elective:
1. Identify situations / cases in which a palliative care consultation is appropriate; identify the procedure for requesting a palliative care consultation; describe who can request a palliative care consultation.
2. Demonstrate the process of a palliative care consultation, including review of basic medical status, assessment of uncomfortable symptoms, review status of potentially life-prolonging therapies, assess relevant psychosocial and spiritual issues, and identify key palliative care issues.
3. Identify the most common symptoms for which patients with advanced illness, and recognize basic modalities of treatment.
4. Demonstrate the ability to speak honestly and compassionately with dying patients and their families about
their illness.

**Schedule of Activities**

- Daily rounding with palliative care team, including evaluating new consultations and providing follow-up.
- Weekly attendance at team meeting for case discussion (Wednesdays 7:30-9:00am in the 4-1200 Conference Room)
- Weekly meeting with the Palliative care Pharmacist after the Wednesday team meeting to go over cases and questions about medication treatments
- Meeting with senior attending every week to go over challenging cases, and to review answers to Palliative Care Workbook.
- Weekly attendance at Wednesday noon conference (alternating with palliative care, clinical ethics, Schwartz, medical humanities and spirituality).
- Attendance at Medical Grand Rounds (Tuesday mornings 8-9am, class of 62 Aud)

**Didactic Activities**

- Attend the weekly Wednesday noon conference (alternating clinical ethics, palliative care, Schwartz Rounds, Medical Humanities, spirituality), Medical Grand Rounds, and Palliative Care Seminar with senior preceptor.

**Required Reading**

- Students will receive a copy of the Palliative Care Primer early in the rotation, which they are expected to read, and to complete the associated workbook. There will be session(s) with a senior palliative care consultant to review the material in the workbook, and to discuss difficult palliative care challenges encountered. Students are expected to read about the palliative care issues encountered by their patients, and to prepare a brief report about a topic of interest by the end of the rotation.

**Student Evaluations**

- Students will be evaluated by the palliative care attendings and nurse practitioners with whom they work with.
MHU615 Independent Creative/Research Projects in Medical Humanities and Bioethics

Course Information

Course Director
Stephanie Louise Brown Clark M.D., Ph.D.
Contact Person
Chris Donnelly, 585-275-5800 christine_donnelly@urmc.rochester.edu
Class Year Name
Independent Creative/Research Projects in Medical Humanities and Bioethics
Class Code
MHU615
Elective Tags
Medical Humanities
Block Length
Students must contact Medical Humanities to identify project and required criteria and then submit as a Special Elective for advisory dean review and approval.
Students
25
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Division of Medical Humanities & Bioethics, G-8011
What time should students report?
Schedule with Preceptor
Who should they report to?
Margie Shaw or Stephanie Brown Clark

Goal

This elective is intended to give individual students an opportunity to undertake research or creative work on topics in medical humanities and/or ethics under the supervision of an appropriate faculty member. The elective is 2 - 4 weeks in length, and no pre-requisites are needed. For example, students may develop and edit a research paper on a medical topic informed by philosophy, anthropology, cultural studies, ethics, literature, etc., or develop and organize a possible medical humanities seminar or elective, or complete their project for the Pathway in Medical Humanities/Clinical Ethics.

Learning Objectives

To research and develop a humanities and/or ethics project (paper, anthology, film, performance, curricular piece) on a topic of particular interest to the individual medical student with oversight by an appropriate supervisor.

To create a "product" that will have been useful and important to the student -- ie a paper, a short film, an electronic module, elective or seminar (including, learning objectives, speakers, field trips and syllabus etc.) for the medical humanities curriculum.
Schedule of Activities

Prior to registering for elective:

Students identify a mentor and have mentor approve proposal, after which the proposal is submitted to Dr. Stephanie Brown Clark (Medical Humanities) or Margie Shaw (Bioethics) for approval. Approval must be received at least two weeks prior to the start date of the elective.

The proposal must include:

Personal Education Goals - what is the value of the project to you personally and/or as a physician-in-training?

Learning Objectives - what are your main learning objectives for this project?

Description of Project including:

Title of project

Dates for elective

Focus of work - for example: create a group of 5-10 artworks or poems, write a personal essay about a difficult ethical conversation between nurse and attending from two perspectives, write a paper on the history of healthcare reform in the US and the role of the AMA, etc.

Consideration of resources - do you need access to films, books, articles on this topic? Are their organizations or individuals that will be involved? Do you need help to connect with them?

Plan of work - how will you use your time?

Product - will you create a paper, an exhibit of images, a poster, a PPT presentation, a collect of stories or reflections, something else?

Faculty Mentor / Advisor of your choosing to provide knowledge, advice and support this project.

Students must submit their project to the advisor on the last day of the elective for grading. Advisors may choose to meet with the student in person or may make other arrangements as needed.

Please clarify expectations and deadlines with your advisor before the elective begins.

Post elective: Student submits completed project to mentor. Mentor give a pass/fail grade

Didactic Activities

This is an independent research project for self-directed learners. Students will identify their learning needs and then address them with appropriate resources with the help of their supervisor.

Required Reading

As appropriate to the individual project of the student.

Student Evaluations
Students must have a "product" at the end of the elective, either as a substantial paper, a film, a possible curricular activity, elective or seminar outline.

Student submits completed project to mentor on the last day of the elective and mentor gives a pass/fail grade.
Course Information

Course Director
Laurence B. Guttmacher M.D.
Contact Person
Mary Fisher (275-6435)
Class Year Name
History of Psychiatry
Class Code
MHU620
Elective Tags
Medical Humanities
Block Length
Need Course Director's Approval
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Contact Dr. Guttmacher
What time should students report?
Contact Dr. Guttmacher
Who should they report to?
Dr. Guttmacher

Goal

The history of medicine, is filled with revealed truths that ultimately proved to be invalid. Students will better understand the social context of our current beliefs and practices, through reviewing historical approaches. This may be either through guided reading or working with primary source material. A written product will emerge at elective end.

Students are to contact Dr. Guttmacher at least two weeks prior to the course.

Content of the elective is subject to negotiation.

Learning Objectives

To consider critically a number of key accepted theories and treatments offered in psychiatry, and understand them in their historical context.

To reflect on the ways in which an accepted theory and/or practice may become ultimately discredited as new technology, new scientific or empirical knowledge emerges.

To understand the ways in which diagnosis, treatment, and theories as to underlying causation are often
socially and culturally dependent.

To recognize the cyclic features of certain approaches within the field of psychiatry: from categorical to individual diagnosis; from institutionalization to deinstitutionalization of the mad; from mindlessness to brainlessness; from theological to secular understanding of patients.

To learn about the key figures in the history of psychiatry.

To learn about the history of psychiatry in Rochester.

Schedule of Activities

This can take two forms, both of which would be subject to negotiation between Dr. Guttmacher and the student:

A. A project with primary research using the rich historical records of the Rochester Psychiatric Center. Since RPC’s history closely parallels that of American institutional psychiatry, exploration of commitment papers, data on admissions and discharges, etc can further our understanding of the history of American psychiatry.

B. A reading elective exploring in depth some aspect of the history of psychiatry.

Dr. Guttmacher will meet at least twice a week with the student engaged in this elective.

In either case, the rotation should lead to a presentation of the work, either to the Corner Society or to RPC and/or a paper.

Didactic Activities

See above

Required Reading

See above. Dependent on the project.
Student Evaluations

Dr. Guttmacher will offer feedback on the final product which emerges from the rotation.
Course Information

Contact Person
Amy Perazzo, Amy_Perazzo@urmc.rochester.edu, 275-2175

Class Year Name
Indelible Impressions-African American Experiences and Resilience

Class Code
MHU621

Elective Tags
Medical Humanities

Block Length
4 Sessions (Fridays) Feb 7, 14, 21 and 28 Must attend all 4 sessions

Students
40

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year

Where should students report?
Adolph Aud. or Case Method Room

What time should students report?
12:15 pm and sign the attendance roster

Who should they report to?
Dean Brenda Lee or Adrienne Morgan, PhD

Goal

Training to prepare students, faculty and staff to have respectful and effective interaction with diverse patients and peers, often focuses on the worldview of others, bias and reaction to difference. While training can enhance the awareness, competence and cultural humility of participants, there is seldom a focus related to preparing and empowering participants to respond when observing, hearing or being on the receiving end of bias.

The 2016 Indelible Impressions Elective will focus on skills to respond when observing or being on the receiving end of bias. In particular, the participants will explore when and how to respond to protect vulnerable individuals, to redress biased and/or misleading comments and situations especially when there is a power differential.

To have a common frame of reference, cases and trigger scenarios from experiences of members of the African Diaspora will be presented and discussed. Elective participants will have the opportunity to present personal scenarios for the discussion.

After participating in the elective students will have a broader appreciation for the unique challenges select members of the African Diaspora in America have experienced and how these challenges may influence health and care delivery.

Learning Objectives
• Recognize how bias has an influence on health and wellness.

• Awareness of personal biases, what underlies personal reactions and how both may influence your care delivery.

• Gain insight regarding the worldview of alleged offenders.

• Increase skills and confidence regarding when and how to respond to protect vulnerable individuals, to redress biased and/or misleading comments and situations especially when there is a power differential.

Schedule of Activities

Elective Requirements

Attend all four sessions – Fridays, February 5, 12, 19 and 26

• Participate in the discussion
• Submit a one page reflection for each session describing insight gained and impact on approach to patients, care delivery and comfort with responding to bias.

Deadlines for submitting the reflection assignments

Week I Monday, February 8, 2016
Week II Monday, February 15, 2016
Week III Monday, February 22, 2016
Week IV Monday, February 29, 2016

E-mail reflection assignments to: brenda_lee@urmc.rochester.edu

Didactic Activities

Update Pending

Required Reading
No supplementary reading will be assigned

**Student Evaluations**

- **Years III and IV students** – will receive one week of elective credit for completing the seminar.
Course Information

Course Director
Benedict F. DiGiovanni M.D.

Contact Person
Bonnie Schuster 585-275-5168 Bonnie_Schuster@urmc.rochester.edu

Class Year Name
Orthopaedic/Musculoskeletal Outpatient Elective

Class Code
MSK600

Elective Tags
Patient Care

Block Length
2 weeks

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Room G5510

What time should students report?
8am

Who should they report to?
Bonnie Schuster

Goal

To provide an overview of musculoskeletal medicine in an outpatient setting and to become familiar with diagnosis and treatment of common Orthopaedic problems.

Learning Objectives

By the end of the rotation the student should be able to:
- Become familiar with the fundamentals of taking an accurate history from patients with musculoskeletal problems.
- Learn basic physical examination of the musculoskeletal system.
- Become familiar with the vocabulary of fractures and to be able to describe clinical and x-ray findings.
- Apply splinting and casting techniques.
- Learn situations where an Orthopaedics consultation is necessary.
- Understand when surgical intervention is in the patient's best interest and when it is not and that different treatment methods can be appropriate for the same conditions in different patients.
- Become aware and evaluate the functional outcomes possible with modern techniques in trauma and reconstructive surgery.
- Assess the functional demands of the amateur and higher level athlete including their rehabilitation.

Schedule of Activities

Students are assigned to one on one preceptors in the Westfall Building D Musculoskeletal unit with a
balanced exposure to subspecialty service from 8:00 AM to 5:00 PM on weekdays. Students will be assigned to the Emergency Room one evening/week as part of their regular schedule to work with the Orthopaedic Resident in active care and procedural skills.

**Didactic Activities**

- Daily morning conference schedules are posted outside the Plato Schwartz Library.
- Grand Rounds held every first Thursday at 7:00 a.m. and is required.
- Daily fracture rounds, presentations of the previous day's Emergency Room fractures, at 7:15 AM (except Thursdays) is also required.
- **Attendance at resident conferences at 6:30 AM is required.** Attendance at Monday Trauma conference at 6:30 AM is required. Other attendance depends on topics. This will be discussed at the start of the rotation.
- Three Core textbooks are loaned to students, serve as reading reference for various musculoskeletal disorders encountered during elective.
- The musculoskeletal pathophysiology of patients in the out patient Musculoskeletal Building will be used to its fullest emphasizing positive physical findings in the musculoskeletal system.
- Students will have the opportunity to independently obtain histories, examine and present patients for review to their preceptor.
- Injecting and aspirating of joints will be demonstrated including best techniques and approaches. Individual discussion with the preceptor will focus on differential diagnosis, assessment and evaluation, cost effective workup and treatment options, and coordination of the patient's overall care with primary care physician.

**Required Reading**

Students are strongly encouraged to read and refer to the 3 Core Textbooks loaned to them:

- Hoppenfeld's text titled Physical Examination of the Spine and Extremities
- Bernstein's textbook titled Musculoskeletal Medicine
- American Academy of Orthopaedic Surgeons textbook titled Essentials of Musculoskeletal Care

Students are welcome to browse amongst the collection of the Plato Schwartz Library as well.

**Student Evaluations**

Evaluations of students will be based on their performance with emphasis upon interests, conscientiousness, interpersonal skills with patients and mentors, and presentation of patients. .
Course Information

Course Director
Benedict F. DiGiovanni M.D.
Contact Person
Bonnie Schuster bonnie_schuster@urmc.rochester.edu 585-275-5168

Class Year Name
Orthopaedic Surgery Externship
Class Code
MSK601
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care, Teaching

Block Length
4 weeks
Students
6
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
4th Year, Visiting
Where should students report?
G5527 Plato Schwartz Library in Orthopaedics
What time should students report?
6:30AM
Who should they report to?
Assigned Resident Team

Goal

To provide an overview of Orthopaedic surgery on an active inpatient services including pre and postoperative evaluation and exposure to outpatient care of the musculoskeletal system.

Learning Objectives

By the end of the rotation the student should be able to:
- Provide an overview in the field of Orthopaedic surgery and its division, i.e. Adult Reconstructive, Hand, Spine, Sports Medicine, Pediatrics, Tumor, Trauma, and Foot and Ankle.
- Learn to reduce common fractures and principals of casting and fracture care.
- Become familiar with the fundamentals of taking an accurate history from patients with musculoskeletal problems.
- Become familiar with the vocabulary of fractures and to be able to describe clinical and x-ray findings.
- Learn basic physical examination of the musculoskeletal system.
- Assist in the Operating Room and become familiar with the objectives of modern techniques in trauma and reconstructive surgery.
- Assist in the care of athletes and assist in interventions that restore their functional return to activity. This includes their rehabilitation.

Schedule of Activities

Students are assigned to be part of the team of an inpatient service in Orthopaedics. Rotations are usually 2
weeks long and the student is part of the team. Students are expected to be present for all morning conferences as posted outside the Plato Schwartz Library. Students will be expected to participate in all aspects of Orthopaedic care of patients on their service. This will include preoperative, intraoperative and postoperative care. They are encouraged to also participate in the orthopaedic care of ambulatory patients by their presence with residents and preceptors in the Westfall Road Musculoskeletal Unit. Assignments to specific subspecialty teams is done by the course director, Dr DiGiovanni. Preferences noted in advance will be given consideration but not guaranteed. There will be emergency orthopaedics care with night coverage assigned, about once/week.

**Didactic Activities**

- Daily morning conference schedules are posted outside the Plato Schwartz Library. Attendance is required.  
- Grand rounds are held the first Thursday of each month at 7:00 AM.  
- Daily fracture rounds or presentation of the previous day's Emergency Room cases take place at 7:15 AM Monday thru Friday, except Thursday as posted.  
- Students will be expected to read and present information on the basic pathophysiology of orthopaedic illnesses that they encounter in the Operating Room and on their inpatients. Physical exams and physical findings of orthopaedic conditions will be emphasized.  

- Three Core textbooks are available to students, serve as reading reference for various musculoskeletal disorders encountered during elective.

**Required Reading**

Students are welcome to browse amongst the collection of the Plato Schwartz Library.

**Student Evaluations**

Evaluations of students will be based on their performance with emphasis upon interests, conscientiousness, interpersonal skills with patients and mentors, and presentation of patients.
**Course Information**

- **Course Director**: Benedict F. DiGiovanni M.D.
- **Contact Person**

**Class Year Name**
Inpatient Orthopaedic Surgery Elective

**Class Code**
MSK602

**Elective Tags**
Inpatient Service

**Block Length**
2 weeks

**Students**
2

**Prerequisites**
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

**Available to the following medical students:**
3rd Year, 4th Year

Where should students report?

What time should students report?

Who should they report to?

**Goal**

**Course Description**

2 week experience in the Department of Orthopaedics

**Location**

Strong hospital or Highland hospital

Orthopaedic trauma call experience: Strong Hospital

Focus on acute treatment, operative and nonoperative, of orthopaedic disorders and injuries

2 weeks on one orthopaedic surgical subspecialty service

2 trauma calls at Strong hospital - Level one trauma center

**Learning Objectives**

Objective
To better understand principles and treatment methods of the surgical subspecialty of orthopaedic surgery

To learn the principles of treatment of orthopaedic emergencies

To better understand the operative treatment of orthopaedic disorders and injuries

To better understand the nonoperative treatment of orthopaedic injuries

**Schedule of Activities**

One weekday evening, work the following day (6pm to 11pm), and one weekend overnight (Friday night or Saturday day)

Weekday morning educational conferences with residents (typically M thru F 6:30am to 7:30am)

Morning inpatient rounds with orthopaedic surgery residents on the subspecialty service
**NAN601 Teaching Tutorial and Review in Human Structure**

**Course Information**

Course Director  
Martha Johnson Gdowski Ph.D.  
Contact Person  
Martha Gdowski, x5-6592 Martha_Gdowski@urmc.rochester.edu  
Class Year Name  
Teaching Tutorial and Review in Human Structure  
Class Code  
NAN601  
Elective Tags  
Teaching  
Block Length  
2 weeks  
Students  
10  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  
Available to the following medical students:  
3rd Year, 4th Year  
Where should students report?  
1-9576 at 8 AM on the morning of the first day of the elective.  
What time should students report?  
8:00 a.m.  
Who should they report to?  
Martha Gdowski

**Goal**

Provide lab instruction, participate in small-group teaching, attend lectures, and assist in preparing students to be successful on examinations in our Phase 1 Human Structure and Function course. This elective is designed for students who wish to review their anatomy, histology and physiology, or for students who wish to gain teaching experience in anticipation of an academic career.

**PREREQUISITE: Ranked in the top 20% of HSF.**

**Learning Objectives**

By the end of the rotation the student should be able to:

· Assist students in identifying key anatomical structures as pointed out in the anatomy dissector.

· Assist students in identifying histologic structures as pointed out in the histology lab manual.

· Help students with dissection in the anatomy lab and assist students as they review material as necessary during designated self-study periods.

· Assist students in identifying key histologic features on digitized images.

· Share with students the clinical relevance and applied importance of key histological, anatomical, and physiological concepts.
· Tutor students outside of formal class periods who need additional help learning human structure and function.

· Serve as an effective tutor in small group activities (PBL, problem sets, physiology lab exercises).

· Foster teamwork, emphasizing the importance of this skill within a health care delivery environment.

· Convey the clinical context for content that is being studied in anatomy, histology, and physiology strands of HSF.

**Schedule of Activities**

Attend all class sessions according to the following class schedule: Monday - Friday, 8-12; Mondays 1-5 (as scheduled); and Fridays 1-5 (as scheduled). Outside tutoring of students may be required. Additional afternoon sessions for reviews may be required.

Students interested in tutoring a PBL must be available for all sessions of the case. The schedule of PBL cases for Fall 2019 follows:

- **PBL 1**: 8/29, 9/3, 9/5
- **PBL 2**: 9/17, 9/19, 9/23
- **PBL 3**: 9/25, 9/27, 9/30
- **PBL 4**: 10/10, 10/14, 10/16
- **PBL 5**: 10/31, 11/1
- **PBL 6**: 11/13, 11/15, 11/19

No more than 2 days absence are permitted during a 2 week elective. If you need to miss additional days, you must either arrange to make that time up during different weeks or reschedule your NAN elective time for an interval that works with your schedule.

Note that the two week elective may be split into two non-consecutive weeks. You must contact the registrar to arrange a two-week elective that differs from the available options.

**Didactic Activities**

Students are expected to read the Anatomy Dissector (copy provided), review in an Anatomy Atlas the material to be covered prior to each day’s dissection, review Histology exercises related to lab, and review Physiology material relevant to physiology exercises. Students also attend all Human and Structure Function lectures. During examination periods, the students will help organize review sessions outside of the scheduled course review periods and help to proctor the examinations.
**Required Reading**

Relevant dissection instructions in the Dissector (provided), appropriate lab exercises in the histology manual (provided) and appropriate chapters in an Anatomy, Histology and Physiology textbook (texts you use in the course or one on open reserve in the Miner Library).

New as of NAN601 2017, there are NAN601 Histology Tutor Guides that has been prepared for each histology laboratory. This allow NAN601 students to review histology material prior to the histology laboratories. This has been designed to assist you in teaching this material effectively in laboratory and student review sessions. Since the active process of searching for and finding structures that are required to be located in the histology laboratory is an integral part of student acquisition and retention of this information, the NAN601 Histology Tutor Guides are NOT to be shared with students in HSF under any circumstances.

**Student Evaluations**

To receive a grade of Pass, students must attend all required lectures and lab sessions, and come prepared to assist students with their laboratories and their learning of human structure and function. When appropriate, tutor students outside of scheduled class periods, prepare prosection material, and assist the faculty in setting up lab practical exams.

No more than 2 days absence are permitted during a 2 week elective. If you need to miss additional days, you must either arrange to make that time up during different weeks or reschedule your NAN elective time for an interval that works with your schedule.

Note that the two week elective may be split into two non-consecutive weeks. You must contact the registrar to arrange a two-week elective that differs from the available options.

Student evaluations in NAN601 may not be available until the end of HSF.
Course Information

Course Director
Joel S. Pasternack M.D., Ph.D.

Contact Person
Joel Pasternack, M.D., Ph.D. (joel_pasternack@urmc.rochester.edu) Julie Pasternack, M.D. (julie_pasternack@urmc.rochester.edu)

Class Year Name
Medical Procedures in Anatomy Lab

Class Code
NAN604

Elective Tags
Research-Basic science

Block Length
1 week

Students
12

Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship, SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year

Where should students report?
Fifth floor Anatomy Lab

What time should students report?
Monday at 9:00 a.m.

Who should they report to?
Dr. Pasternack

Goal

Revisit human anatomy as it relates to successfully and safely performing medical procedures. Practice a variety of procedures on lightly embalmed cadavers in anatomy lab.

Learning Objectives

The student should be able to perform a variety of medical procedures on the lightly embalmed cadaver model. The student should learn to use the equipment necessary to safely and effectively perform the procedure.

Specifically the student should learn to do:
1. Endotracheal intubation
2. Cricothyroidotomy
3. Tracheostomy
4. Chest tube placement
5. Central Venous line placement – internal jugular, subclavian, femoral
6. Joint aspirations: hip, knee, ankle, shoulder, elbow, wrist, great toe mtp
7. Anesthetic nerve block placement– face, wrist, fingers, ankle, toes, femoral
8. Lumbar puncture
9. Assessment of traumatic laceration using topographical anatomic anticipation
10. Exploration of extremity lacerations, identification and repair of injured structures

In addition, students who are planning a residency in a surgical specialty will have an opportunity to do procedures related to their area of interest. Prior discussion with Course Director advised to optimize experience.

**Schedule of Activities**

This is a week long cadaver laboratory elective.

Course begins Monday morning at 9 am and will start with Central Lines and Joint aspirations as these procedures use the ultrasound which is best done prior to any incisions. By the end of the second day we will have addressed procedures 1-8 above. The rest of the week will be devoted to specific procedures determined by student interest.

Note: in this elective the students will suture closed the wounds created for procedures or dissections.

**Didactic Activities**

At the end of the week, each student will give brief presentation (15 minutes) on a specific procedure describing the indications, the relevant anatomy, and the technique.

**Required Reading**

Recommended textbooks:
- Roberts and Hedges' Clinical Procedures in Emergency Medicine
- Essential Anatomy Dissector (by J.T. Hansen)
- Clinically Oriented Anatomy (by K.L. Moore & A.F. Dalley)
- Atlas of Human Anatomy (by F.H. Netter)
- Surgical Exposures in Orthopedics –the anatomic approach (by S. Hoppenfeld, & P. deBoer)

**Student Evaluations**

Students will be evaluated based on their demonstrated ability to do the procedure and explain the relevant anatomy.
Course Information

Course Director
Robert I. Thompson-Stone M.D.

Contact Person
Lorie Wolfanger, 275-6380 lorie_wolfanger@urmc.rochester.edu

Class Year Name
Ambulatory Neurology

Class Code
NEU610

Elective Tags
Outpatient Service, Patient Care

Block Length
2 weeks - Must get prior approval before scheduling

Students
1

Prerequisites
NEU300 Neurology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Students will receive schedule detailing where and when to report on the first day.

What time should students report?
Per schedule.

Who should they report to?
Per schedule

Goal

To learn how to evaluate and treat neurological disorders seen in an outpatient neurology practice.

This elective is offered on a very limited basis and is reserved for students seriously considering a career in neurology. Prior approval from the course director is required before scheduling this elective.

Learning Objectives

1. To learn how to evaluate and treat common neurological outpatient problems, including headache, dizziness, back and neck pain, and peripheral nerve disorders.

2. To learn how to evaluate and treat disorders seen in a subspecialty neurology outpatient clinic, including epilepsy, multiple sclerosis, neuromuscular disorders, movement disorders, and cognitive neurology.

Schedule of Activities
The student will spend each half-day in one of the subspecialty or general neurology outpatient clinics.

**Didactic Activities**

- Noon clinical conferences
- Neurology Grand Rounds on Friday mornings

**Required Reading**


**Student Evaluations**

The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade.

Each student will receive a letter containing a summary of his/her narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the Neurology experience.
**Course Information**

Course Director
Robert I. Thompson-Stone M.D.

Contact Person
Lorie Wolfanger, 275-6380 lorie_wolfanger@urmc.rochester.edu

Class Year Name
General Neurology Consultation Service

Class Code
NEU612

Elective Tags
Consultation Service, Teaching

Block Length
2 weeks

Students
2

Prerequisites
NEU300 Neurology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Student will attend Morning Report in Room 5-5220 (Garvey Room) on the first day.

What time should students report?
7:30 am

Who should they report to?
Resident they are assigned to

**Goal**

To learn the principles and skills underlying the recognition and management of neurologic diseases a general medical practitioner is most likely to encounter in practice.

**Learning Objectives**

1. To develop skills in obtaining complete neurological histories, in performing accurate neurological examinations, and in selecting appropriate therapies on a general neurology consultation service in a tertiary referral center.

2. To gain in-depth knowledge of major categories of neurological disease, with special emphasis on stroke, epilepsy, coma and mental status changes, movement disorders, neuromuscular disorders, demyelinating disorders, infections of the nervous system, tumors of the nervous system, head trauma and dementia.

3. To gain experience in the appropriate ordering and interpretation of neurodiagnostic tests, including head and spine CT and MR scans, EEG, Evoked Potential Testing, Neurovascular testing, and EMG and nerve conduction studies.
4. To develop and improve written and oral communication skills.

**Schedule of Activities**

The General Neurology Consultation Service provides neurology consultations to the medical and surgical services, emergency room and intensive care units. The service consists of a neurology Attending, a neurology PGY-3, sometimes an intern, and a medical student.

Each student will evaluate, present and write-up approximately one new patient per day and will be responsible for following his/her patients during hospitalization. The student on the neurology consultation service will be responsible for obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to him/her. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated. Students are expected to attend either Saturday or Sunday morning rounds. The remainder of the weekend is free.

**Didactic Activities**

Attend morning report, work rounds, attending rounds, noon conferences, and Neurology Grand Rounds on Friday mornings.

**Required Reading**


**Student Evaluations**

The final grade in the General Neurology Consultation Service is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of his/her narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the General Neurology Consultation Service.
Course Information

Course Director
Robert I. Thompson-Stone M.D.
Contact Person
Lorie Wolfanger 275-6380 lorie_wolfanger@urmc.rochester.edu
Class Year Name
Pediatric Neurology
Class Code
NEU615
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Teaching
Block Length
2 weeks
Students
1
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Student will receive schedule detailing where and when to report at least one week prior to starting.
What time should students report?
see above
Who should they report to?
see above

Goal

To become familiar with the important characteristics of the neurological history and examination in children of various ages, and learn how to evaluate and treat neurological disorders seen in an outpatient setting.

Learning Objectives

1. To improve the student’s history-taking skills and neurologic exam in infants and children.
2. 
3. To learn the interrelationship of abnormalities of the nervous system with normal growth and development of the nervous system.
4. 
5. To provide the student with an exposure to and a forum for discussion of a wide variety of neurologic problems in pediatric patients.
6. 
7. To develop and improve written and oral communication skills.

Schedule of Activities
Students will be assigned outpatient child neurology clinics for ~7 half-days of the week (general child neurology clinic and subspecialty clinics). This elective is meant to compliment the inpatient child neurology service that students experience during the neurology clerkship. However, if a student would prefer an inpatient experience during this elective, that may be possible and they should reach out to the course director.

On the first day of the rotation, the student will report to 200 East River Road clinic and will usually meet briefly with Dr. Thompson Stone in the morning or around Noon. While on the outpatient service, the student will attend all of the outpatient child neurology clinics assigned to them. The clinics meet Monday - Friday from 8:30 or 9:00 am to 12:00 noon and from 1:00 - 5:00 pm. There is no clinic on Friday mornings due to Neurology Grand Rounds. The student will obtain the history and examine at least one new patient each clinic session. In addition, they will see a number of patients for follow-up visits. All patients will be reviewed with an attending child neurologist. The student may be asked to write a note for each patient seen.

**Didactic Activities**

Students will participate in the following conferences: Child Neurology Division conference on Tuesdays from 8 – 9 AM in Garvey room, Patient of the Week conference on Thursdays from 8 – 9 AM in Marsh library, and Neurology Grand Rounds on Friday morning from 9 – 10:30 AM in K307

**Required Reading**


**Student Evaluations**

The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of their narrative evaluations and the final grade approximately six weeks following completion of the elective.
**Course Information**

Course Director  
Andrea Christina Wasilewski M.D.  
Contact Person  
Lorie Wolfanger 5-6380 lorie_wolfanger@urmc.rochester.edu  
Class Year Name  
Neuro-Oncology Elective  
Class Code  
NEU617  
Elective Tags  
Consultation Service, Patient Care  
Block Length  
2-4 wks - Must get prior approval before scheduling  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
2nd Year, 3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Wilmot Cancer Ctr, Room 2-0767  
What time should students report?  
8:30 AM  
Who should they report to?  
Nimish Mohile, M.D.

**Goal**

To learn the principles and skills underlying the recognition and multi-disciplinary management of adult and pediatric brain tumors, central nervous system metastases and neurologic complications of cancer.  
Must get prior approval.

**Learning Objectives**

1. To gain in-depth knowledge about the etiology, pathogenesis, and management of primary and secondary adult and pediatric brain tumors.  
2. To gain exposure to the multidisciplinary tools used in the assessment and treatment of brain tumors including neurosurgical procedures, radiation treatment techniques and neuropathologic evaluation of surgical specimens.  
3. To gain experience in recognizing, evaluating and treating neurologic complications of cancer.  
4. To develop communication skills with a focus on discussing prognosis, treatment options and experimental therapies with cancer patients.

**Schedule of Activities**

**Outpatient Activities**

Each student is assigned to ~6 half-days of outpatient clinic. The student will see new patients as well as
selected follow-up patients. They will be responsible for evaluating, presenting and writing notes on the outpatients that they see. The student will present patients with new brain tumors, brain metastases and neurologic complications of cancer to the relevant multi-disciplinary brain tumor conference. During the Adult brain tumor clinic, the student will have an opportunity to interact with and see patients with pediatric neuro-oncology, neurosurgery, radiation oncology and the brain tumor social worker.

Inpatient Activities
The student will have the opportunity to see inpatient consultations on patients with newly diagnosed brain tumors or hospitalized cancer patients with new neurologic symptoms. The student will be responsible for evaluating, presenting and writing notes on these patients. They will continue to follow the patient as long as they need active neuro-oncologic care.

Didactic Activities
Students will participate in the three cancer management conferences to gain exposure to multi-disciplinary management and discussions of cancer patients: lymphoma, adult brain tumor and pediatric brain tumor. The student will also have the option to attend neurology grand rounds and cancer center grand rounds if they do not conflict with a longitudinal activity related to an assigned patient. The student will meet with the elective co-director (Dr. Wasilewski) at the beginning of the rotation and will be provided with seminal articles and reviews in neuro-oncology. Students will participate in the three cancer management conferences to gain exposure to multi-disciplinary management and discussions of cancer patients: lymphoma, adult brain tumor and pediatric brain tumor. The student will also have the option to attend neurology grand rounds and cancer center grand rounds if they do not conflict with a longitudinal activity related to an assigned patient. The student will meet with the elective director (Dr. Wasilewski) at the beginning of the rotation and will be provided with seminal articles and reviews in neuro-oncology.

Required Reading
Intracranial Tumors: Diagnosis and Management. DeAngelis et al., 2002


Student Evaluations
The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a
consensus grade. Each student will receive a letter containing a summary of their narrative evaluations and the final grade approximately six weeks following completion of the elective.
**Course Information**

Course Director  
Robert I. Thompson-Stone M.D.

Contact Person  
Lorie Wolfanger 5-6380 lorie_wolfanger@urmc.rochester.edu

Class Year Name  
Stroke Consultation Service Elective

Class Code  
NEU618

Elective Tags  
Consultation Service

Block Length  
2 weeks

Students  
2

Prerequisites  
NEU300 Neurology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year

Where should students report?  
Students will receive schedule detailing where and when to report on the first day.

What time should students report?  
Per schedule.

Who should they report to?  
Per schedule.

**Goal**

To learn the principles and skills underlying the recognition and multi-disciplinary management of cerebrovascular disease.

**Learning Objectives**

1. To recognize the signs and symptoms of acute ischemic stroke.
2. To utilize current treatment guidelines for ischemic stroke, especially concerning blood pressure management, anticoagulation, and use of thrombolytic therapy.
3. To identify common risk factors for stroke.
4. To utilize current recommendations for the use of anti-platelet agents and oral anti-coagulants in stroke prevention.
5. To utilize strategies for preventing and treating increased intracranial pressure.
6. To perform and record the National Institutes of Health Stroke Scale.

**Schedule of Activities**
The acute stroke service provides consultations for patients suspected of having an acute stroke, TIA, intracerebral hemorrhage or subarachnoid hemorrhage. The service consists of a neurology attending, a neurology PGY-3, sometimes an intern, and a medical student. Each medical student will evaluate, present and write-up approximately one new patient per day and will be responsible for following his/her patients during hospitalization. Students are expected to attend either Saturday or Sunday morning rounds. The remainder of the weekend is free. The student will be responsible for obtaining a complete history, performing a complete general and neurological examination, generating a differential diagnosis and formulating a plan of treatment for all patients that are assigned to them. They will be responsible for presenting each assigned patient as needed on rounds, and for completing the work-up on the same day that the patient is evaluated.

**Didactic Activities**

Attend morning report, work rounds, attending rounds and noon conferences.

**Required Reading**


**Student Evaluations**

The final grade is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of their narrative evaluations and the final grade approximately six weeks following completion of the elective.
**Course Information**

Course Director  
Robert I. Thompson-Stone M.D.

Contact Person  
Lorie Wolfanger, 585-275-6380, lorie_wolfanger@urmc.rochester.edu

Class Year Name  
Neurology Inpatient Service

Class Code  
NEU619

Elective Tags  
Consultation Service, Teaching

Block Length  
2 weeks

Students  
4

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
Students will receive schedule detailing where and when to report on the first day.

What time should students report?  
As per schedule

Who should they report to?  
As per schedule

**Goal**

To learn how to evaluate and treat neurological disorders seen in the inpatient setting.

**Learning Objectives**

1. To learn how to obtain an accurate neurological history, and to perform and interpret a neurological examination.

2.  

3. To learn the appropriate indications for ordering laboratory studies in neurology: EEG, EMG, nerve conduction studies, evoked potentials, lumbar puncture, CT and MR imaging of the brain and spinal cord.

4.  

5. To learn how to evaluate common inpatient neurological conditions (coma and mental status changes, stroke, seizures, multiple sclerosis, neuromuscular disorders).

**Schedule of Activities**

The Neurology Inpatient Service consists of a 24-bed unit located on 5-1600. The neurology inpatient service
is responsible for the care of patients with neurologic disorders, and the service is divided into two teams, each consisting of a neurology attending, a neurology PGY-2, a neurology, psychiatry or anesthesiology PGY-1 and medical students. The RED team takes care of patients with vascular neurologic problems (stroke), and the BLUE team takes care of patients with general neurologic problems. Students may request one of the teams in particular at the time of signing up for the elective, and efforts will be made to honor that request if possible. If no specific request is made, students will be randomly assigned one team.

Each student will evaluate, present and write-up approximately one new patient daily and will be responsible for following their patients during hospitalization. Students will participate in the various teaching conferences of the Department of Neurology at Strong Memorial Hospital, including daily attending rounds and daily work rounds with the residents. Students are expected to attend either Saturday or Sunday morning rounds. The remainder of the weekend is free.

**Didactic Activities**

Attend morning report, work rounds, attending rounds, noon conferences, and Neurology Grand Rounds on Friday mornings.

**Required Reading**


**Student Evaluations**

The final grade in the Neurology Inpatient Service is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of his/her narrative evaluations and the final grade in the neurology elective approximately six weeks following completion of the Neurology Inpatient Service.
Course Information

Course Director
Debra E. Roberts M.D., Ph.D.
Contact Person
Pamela Marks pamela_marks@urmc.rochester.edu
Class Year Name
NeuroMedicine ICU
Class Code
NEU621
Elective Tags
Inpatient Service
Block Length
2 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Please report directly to unit 8-1200 and ask for the APP on service.
What time should students report?
8am
Who should they report to?
APP

Goal

• To learn how to manage the post-operative care of neurosurgery patients, such as ICP management, SAH/ICH management, and tumor removal.
• To be exposed to neurological diseases that requires intensive care treatment such as acute neuromuscular diseases and seizure disorders.
• To learn to care for patients with other organ support devices such as ventilator management and CRRT.
• To learn how to identify and treat infections in neurologically ill patients.
• To learn how to manage common critical care problems such as, but is not limited to, acute coronary syndrome, shock, sepsis, arrhythmias, ARDS, and AKI.
• To learn how to work in a unit with a multidisciplinary provider model including critical care Nurse Practitioners (NP), Physician Assistants (PA), residents from neurology, neurosurgery, and ENT, and critical care fellow’s from Anesthesiology, Neurology, Emergency Medicine and Internal Medicine.

Learning Objectives

The Medical student on the NeuroMedicine ICU service will be assigned patients to admit, evaluate, and present at morning rounds. All evaluation and procedures on patients may be done by the student under appropriate supervision by the resident and/or Fellow.

Schedule of Activities

Daily rounds will begin on the Neuro ICU beginning at 8:00am and will end around 12:30pm. Evening work
rounds begin at about 5pm.

**Didactic Activities**

Informal teaching sessions are part of rounds by attending/fellow or selected personnel.

**Required Reading**

None required prior to the rotation.

**Student Evaluations**

Students performance will be graded by: (I) their participation in rounds and ability to complete a coherent admission notes and daily progress notes in a timely basis; (ii) direct observation of their clinical skills including history taking and physical exam; and (iii) effectiveness as a team player
NEUEXT Neurology Sub-Internship

Course Information

Course Director
Robert I. Thompson-Stone M.D.
Contact Person
Lorie Wolfanger, 275-6380, lorie-wolfanger@urmc.rochester.edu
Class Year Name
Neurology Sub-Internship
Class Code
NEUEXT
Block Length
4 weeks
Students
2
Prerequisites
NEU300 Neurology Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Student will attend morning report in room 5-5220 (Garvey Room) on the first day
What time should students report?
7:30
Who should they report to?
Resident they are assigned to

Goal

To learn the principles and skills underlying the recognition and management of the neurologic diseases a general medical practitioner is most likely to encounter in practice.

Due to limited space, we cannot offer this to visiting students.

Learning Objectives

1. To learn how to obtain an accurate neurological history, and to perform and interpret a neurological examination on inpatients admitted to a general neurology service.

2. To learn the appropriate indications for ordering laboratory studies in neurology: EEG, EMG, nerve conduction studies, evoked potentials, lumbar puncture, CT and MR imaging of the brain and spinal cord.

3. To learn how to evaluate common neurological inpatient problems, including stroke, seizures, multiple sclerosis, dementia, CNS tumors, and neuromuscular disorders.
4. To develop the many personal attributes necessary for becoming an effective physician, including honesty, compassion, reliability, and effective communication.

**Schedule of Activities**

The Neurology Inpatient Service consists of a 24-bed unit located on 5-1600. The neurology inpatient service is responsible for the care of patients with neurologic disorders, and the service is divided into two teams, each consisting of a neurology attending, a neurology PGY-2, a neurology, psychiatry or anesthesiology PGY-1 and medical students. The RED team takes care of patients with vascular neurologic disorders (stroke), and the BLUE team takes care of patients with general neurologic disorders. Students will be randomly assigned one team.

Each student will evaluate, present and write-up several new patient daily and will be responsible for following their patients during hospitalization. Students will participate in the various teaching conferences of the Department of Neurology at Strong Memorial Hospital, including daily attending rounds and daily work rounds with the residents. Students will take evening float call with a neurology resident (4 PM – 8 PM, out by 9 PM) two evenings over the four weeks. Students are expected to attend either Saturday or Sunday morning rounds. The remainder of the weekend is free.

**Didactic Activities**

Attend morning report, work rounds, attending rounds, noon conferences, and Neurology Grand Rounds on Friday mornings.

**Required Reading**


**Student Evaluations**

The final grade for the Neurology Sub-Internship is based on the narrative evaluations of clinical performance by faculty and residents. The Neurology Clerkship grading committee reviews the narrative evaluations for each student and assigns a consensus grade. Each student will receive a letter containing a summary of their narrative evaluations and the final grade for the neurology subinternship approximately six weeks following completion of the rotation.
Course Information

Course Director
Katrina F. Nicandri M.D.

Contact Person
Julia MacCallum, MD julia_maccallum@urmc.rochester.edu

Class Year Name
Ambulatory Ob-Gyn

Class Code
OBG605

Elective Tags
Outpatient Service, Patient Care

Block Length
4 weeks

Students
1

Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, International Visiting, Visiting

Where should students report?
2-4474

What time should students report?
8:00am

Who should they report to?
Julia MacCallum, MD

Goal

The goal is to provide students with a variety of experiences in outpatient obstetrics and gynecology.

Learning Objectives

1. Gain experience in performing pelvic examinations
2. Develop proficiency assessing pregnant women (high and low risk prenatal care)
3. Improve skill in triage and management of abnormal pap smears in Colposcopy Clinic
4. Participate in the evaluation and management of women with undergoing genetic counseling in the antenatal period.
5. Interpret basic obstetrical and gynecologic ultrasounds
6. Develop diagnostic and management skills for common gynecologic problems.
7. Learn to evaluate and care for women with family planning needs.
8. Learn to evaluate and care for women with complex pelvic pain syndromes.

Schedule of Activities

Students on this rotation work with General OB-GYN, Family Planning, Genetics, and MFM faculty as well as
OB-GYN Generalist Faculty and residents in the ambulatory setting. The clinical experience is divided between outpatient gynecology, family planning, high-risk obstetrics, genetics, and OB-GYN ultrasound, usually encompassing the hours of 8:00 AM to 5:00 PM. Outpatient sites are the Lattimore Building and at the Red Creek offices.

**Didactic Activities**

There are various educational conferences on Thursday mornings (grand rounds, OB/GYN morbidity and mortality, resident lectures, etc.) that the student attends. Dr. Nicandri will meet with students weekly to discuss a variety of topics relevant to OB/GYN.

**Required Reading**

There is no required reading per se, but familiarity with either Williams or Gabbe's Obstetrics, and Droegemueller's Gynecology is expected.

**Student Evaluations**

Evaluations are based on assessments from the faculty and residents. Important elements are enthusiasm & interest, willingness & availability to actively participate in patient care, and evidence of active learning through reading and discussion with faculty.
Course Information

Course Director
Sajeena M. Geevarghese M.D.
Contact Person
Karin Bow 442-8020 125 Lattimore Road, Suite 258, karin_bow@urmc.rochester.edu
Class Year Name
Gynecologic Oncology
Class Code
OBG608
Elective Tags
Inpatient Service, Outpatient Service, Patient Care
Block Length
2-4 weeks
Students
1
Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Highland Hospital
What time should students report?
TBA; Please call pager # (585) 220-0948 to arrange start time.
Who should they report to?
Chief Resident on Gynecologic Oncology.

Goal

The gynecologic oncology elective provides experience in inpatient and operative management of women with gynecologic cancers. Students will be active participants in the evaluation and treatment of women admitted for management. In addition, the student will be exposed to the radical surgery used in treating gynecologic cancer. In the outpatient setting, students will learn the appropriate evaluations and testing necessary for women with suspected or known gynecologic cancers.

Students will prepare and present cases on daily rounds as well as at a weekly Tumor Board.

Schedule of Activities

Daily Rounds

Surgery (by assignment)

Clinic (by assignment)

Required Reading

Posted on Blackboard - students doing an elective will be given access to articles
Student Evaluations

Students are evaluated by the resident and attending staff.
Course Information

Course Director
John T. Queenan M.D.
Contact Person
Course Director: John T. Queenan, Jr., MD; Contact: Anne Tedrow 275-7891

Class Year Name
Reproductive Endocrinology and Infertility

Class Code
OBG620

Elective Tags
Consultation Service, Outpatient Service, Patient Care

Block Length
1 week

Students
1

Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, Visiting

Where should students report?
Our clinical setting is located at 500 Red Creek Drive Suite #220 in Rochester, NY Phone: (585) 487-3378.

Email me before the start of your rotation: john_queenan@urmc.rochester.edu

What time should students report?
8:00 am on the first day of the rotation Suite #220 Strong Fertility Center 500 Red Creek Drive Rochester, NY 14623

Who should they report to?
Appointment secretary@Front desk

Goal

You will gain experience in the evaluation and treatment of infertility patients. Students will be present at surgeries, in vitro fertilization procedures, office evaluations, and radiologic procedures. They will also have time to see activities that place in our Andrology lab and our Embryology lab which are both on site.

Learning Objectives

By the end of the elective the student should be able to:
Perform a comprehensive reproductive history in the couple with infertility or the woman with a reproductive endocrinopathy.

Describe the basic work up for infertility.

Identify the indications for assisted reproductive technologies.

Understand the role of surgery in the treatment of infertility.

Explain the appropriate work up for anovulation.

Schedule of Activities
Students will be expected to see patients with one of the attending physicians from 8:00am to 5:00pm, weekdays. On some days there will be surgery, ultrasound exams or hysterosalpingograms.

**Didactic Activities**

Resident lecture series: Thursdays: 9:00-11:00. These lectures are aimed at the residents, but students should be able to take advantage, as well.

OB/GYN grand rounds: Thursdays, 7:30-8:30 a.m.

IVF conference: Mondays 3:15-4:30 pm: review of patients in treatment, new patients and follow up.

Division research seminars: (optional) Thursday mornings following Grand rounds

Joint conferences with medical endocrinology: Third Friday each month, 7:45 a.m.

OB/GYN Journal Club: is part of Grand Rounds Schedule and also meets at night on a quarterly basis.

**Required Reading**


* Other materials may be recommended to supplement the conferences.

**Student Evaluations**

Students should keep a log recording numbers and types of procedure to help document that learning objectives have been achieved. They will be expected to participate in conferences. They must receive a satisfactory evaluation from the attending physicians with whom they have worked.
Course Information

Course Director
Lisa M. Gray M.D.
Contact Person
Dr. Lisa Gray, (585) 275-7480, lisa_gray@urmc.rochester.edu
Class Year Name
Maternal-Fetal Medicine
Class Code
OBG621
Elective Tags
Inpatient Service, Outpatient Service, Patient Care
Block Length
4 weeks
Students
1
Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
4th Year, Visiting
Where should students report?
2-3237
What time should students report?
8:00 am
Who should they report to?
Dr. Gray

Goal

The goal is to provide students with in-depth exposure to various aspects of Maternal-Fetal Medicine (MFM).

Learning Objectives

1. Manage normal and complicated labor and delivery
2. Understand concepts of antepartum and intrapartum management of selected high-risk pregnancies (e.g. preeclampsia, diabetes, preterm labor, premature rupture of membranes, placental abruption, etc.)
3. Perform and interpret a basic obstetrical sonogram
4. Interpret antepartum and intrapartum fetal heart rate tracings
5. Understand the role of the Maternal-Fetal Medicine subspecialist

Schedule of Activities

Students on this rotation are overseen by the MFM faculty and OB Chief Resident at Strong Memorial Hospital. The clinical experience is divided between inpatient and outpatient management of high-risk (and some low-risk) pregnancies, and the student will have the opportunity to follow antepartum and intrapartum patients. The course entails rotations through the resident high-risk obstetrical clinics, Ob/Gyn ultrasound, Labor and Delivery, and the antepartum inpatient obstetrical service. Generally two weeks are spent on
outpatient and two weeks on inpatient, although time allocations can be flexible.

**Didactic Activities**

There are several meetings each week to discuss high-risk patient management, as well as a research meeting, Ob/Gyn grand rounds, and combined Ob/Peds case presentations. There are also optional resident conferences that the student may attend, as desired. I meet with the students weekly on an informal basis to discuss topics of MFM interest.

**Required Reading**

There is no required reading per se, but familiarity with either Williams Obstetrics or Gabbe's Obstetrics is expected.

**Student Evaluations**

Evaluations are based on assessments from the MFM faculty and residents. Important elements are enthusiasm & interest, willingness to actively participate in patient care, availability in Labor and Delivery and outpatient clinics, and evidence of active learning through reading and discussion with faculty.
OBG622 Family Planning
**Course Information**

Course Director  
Sarah J. Betstadt M.D., M.P.H.  
Contact Person  
Donna Darby, 585-273-2029, donna_darby@urmc.rochester.edu  
Class Year Name  
Family Planning  
Class Code  
OBG622  
Elective Tags  
Inpatient Service, Outpatient Service, Patient Care  
Block Length  
2 wks  
Students  
1  
Prerequisites  
OBG300 Obstetrics and Gynecology Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
URMC Women's Health Practice at Lattimore 125 Lattimore Road. Rochester, NY 14642  
What time should students report?  
8:15am  
Who should they report to?  
Dr. Sarah Betstadt, Dr. Amy Harrington or Alison Carletta, NP, Dr. Natalie Whaley

**Goal**

To become familiar with the epidemiological, psychosocial, medical and surgical aspect of abortion and contraceptive care.

**Learning Objectives**

In this Reproductive Health 2-week elective, we aim to teach you:

1. The epidemiology of unintended pregnancy and abortion care in the U.S.
2. The medical evidence foundations of safe abortion care in the first and second trimesters
3. The psychosocial aspects of counseling and caring for women who are having abortions
4. The surgical process of first and second trimesters abortions, with hands on experience
5. Patient educational approaches to contraceptive counseling and care
6. The surgical process of contraceptive procedures (arm and uterine implant insertion), with hands on experience

**Schedule of Activities**

Week One
1. Monday Office preoperative patient visits (1st and 2nd trimester patients)
2. Tuesday AM: 1st trimester surgical abortion procedures. PM: Office preoperative patient visits
3. Wednesday Operating Room 2nd trimester surgical abortion procedures OR Complex Contraception Clinic (select wednesdays)
4. Thursday Pending: Office preoperative patient visits OR Planned Parenthood session
5. Friday Pending: OR 2nd trimester surgical abortion procedures OR General Obgyn office OR Ultrasound OR Labor and Delivery

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**Didactic Activities**

Journal Club presentation.

Thursday AM: Grand Rounds and Obgyn Resident Lectures pending schedule.

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**Required Reading**

Will be emailed prior to starting the elective.

Please review:  www.guttmacher.org

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**Student Evaluations**

Students should log all procedures they attend during the rotation.

The attending(s) with whom the student worked will do an in-person evaluation during last day of rotation.
OBG623 Inpatient Obstetrics and Gynecology

Course Information

Course Director
Kristen E. Burhans M.D.

Contact Person
Donna Darby donna_darby@urmc.rochester.edu 585-275-7149

Class Year Name
Inpatient Obstetrics and Gynecology

Class Code
OBG623

Elective Tags
Inpatient Service

Block Length
4 weeks

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, Visiting

Where should students report?

What time should students report?

Who should they report to?
Course Information

Course Director
Kristen E. Burhans M.D.

Contact Person
Donna Darby, (585) 275-7149, Donna_Darby@urmc.rochester.edu Kristen_Burhans@urmc.rochester.edu

Class Year Name
Obstetrics and Gynecology Sub-Internship

Class Code
OBGEXT

Block Length
4 weeks

Students
2

Prerequisites
(ALL) MED300 Medicine Clerkship, OBG300 Obstetrics and Gynecology Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year

Where should students report?
2-3257

What time should students report?
7:30AM

Who should they report to?
Dr. Burhans

Goal

The goal is to provide students with in-depth exposure to various aspects of inpatient Obstetrics and Gynecology. It is appropriate for students considering or planning to enter OB-GYN, or for students entering other specialties who want further obstetrics and gynecology experience to improve their primary care skills.

Learning Objectives

By the end of the rotation the student should be able to:
• Admit patient to labor and delivery, manage normal labor and assist with vaginal delivery
• Interpret antepartum and intrapartum fetal heart rate tracings
• Understand concepts of antepartum (prenatal) management of low risk and selected high-risk pregnancies
• Refine breast and pelvic exam skills

• Generate differential diagnoses for common gynecological presentations to the emergency department (abnormal uterine bleeding, pelvic pain, ectopic pregnancy, ovarian cysts, ovarian torsion, vaginal discharge, PID, TOA, etc.) and formulate plans for evaluation and management

• Generate differential diagnoses for common obstetric presentations to triage (rupture of membranes, preterm labor, vaginal bleeding, vaginal discharge, decreased fetal movement, pre-eclampsia evaluation, flu, etc) and formulate plans for evaluation and management

• Assist on gynecological surgeries and cesarean deliveries.
**Schedule of Activities**

OB-GYN residents and faculty oversee students on this rotation. The course is divided into 2 weeks on GYN and 2 weeks on OB, including the inpatient services, emergency room, and operating rooms. One week is typically scheduled as night shifts (usually one of the two OB weeks). The student will follow patients antepartum and intrapartum. Students are expected to care for patients at the level of an intern.

**Didactic Activities**

Weekly OB-GYN resident conferences (Thursday AM)

OB-GYN Grand Rounds (Thursday AM)

Combined OB/PEDS case presentations (Wednesday 1PM during OB days week).

Daily inpatient rounds with either the Generalist or MFM attending.

Weekly Skills Sessions with the course director - practicing an assortment of basic obstetric/gynecologic skills through student-selected simulation activities (cervical exams, AROM/FSE/IUPC/Foley bulb application, vaginal deliveries, steps of a c-section, neonatal circumcision, suturing/knot tying, basic laparoscopic skills, IUD/nexplanon insertion)

**Required Reading**

There is no required reading per se, but familiarity with either Williams' or Gabbe's "Obstetrics" and either Hacker and Moore's "Essentials of Obstetrics and Gynecology" or Te Linde's "Operative Gynecology" is expected. All of these titles are available in full text through Miner Library site.

**Student Evaluations**

Evaluations are based on assessments from the GYN and OB faculty and residents. Important elements are enthusiasm, motivation & interest, willingness to actively participate in patient care both on Labor and Delivery and in the GYN operating rooms, and evidence of active learning through reading and discussion with faculty.
OME605 Professionalism in Medicine

**Course Information**

Course Director  
David Reny Lambert M.D.

Contact Person  
Penny Sarsfield - 275-5910 penny_sarsfield@urmc.rochester.edu

Class Year Name  
Professionalism in Medicine

Class Code  
OME605

Elective Tags  
Teaching

Block Length  
1 week

Students  
12

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, MD/PhD in Research

Where should students report?  
PBL rooms per published orientation schedule

What time should students report?  
per orientation schedule

Who should they report to?  
Penny Sarsfield

**Goal**

To broaden the student's professional development and understanding of ethical dilemmas in medical education and careers in medicine.

MD/PhD, Third year students and forward are eligible to take the elective.

**COURSE DIRECTORS**  
David Lambert, M.D.

**Learning Objectives**

- Identify and interpret the ethical dilemmas and professionalism concerns in the case scenarios

- Discuss and explain the subtle nuances in professionalism and ethical cases
· Develop skills in facilitating an orientation Professional Development Group

**Schedule of Activities**

Most of the activities will occur during the Year I Orientation Week, August 10 - 14, 2020

**Didactic Activities**

· Attend the orientation for the new Professional Development Group facilitators
· Co-facilitate an orientation Professional Development Group for the incoming medical students
· Attend the White Coat Ceremony
· Attend the Friday integration conference for the incoming class
· Prepare a one page summary on the lessons learned from co-facilitating the Professional Development Group and provide an assessment on how the week impacts on the incoming students’ professional development
· Research, prepare and submit a professionalism case scenario for use in future Orientation Professional Development Groups, for the SMD Honor Board Educational sessions and/or in the Advisory Dean Groups.

**Required Reading**

URSMD Professional Development Facilitator Guide and related documents

**Student Evaluations**

· To receive a grade of Pass, student must attend all the scheduled sessions and prepare and submit a professionalism case scenario. The student must provide what topic of professionalism the case addresses - i.e. Issues of power differentials in the medical profession - and also provide a scholarly reference to support the information.
· A summary of your experience as a PD instructor.
**Course Information**

Course Director  
Mithra Osiris Gonzalez M.D.

Contact Person  
Patty DeBurro - Education Coordinator 273-3954

Class Year Name  
Basic Ophthalmology Elective

Class Code  
OPH600

Elective Tags  
Outpatient Service

Block Length  
1 week

Students  
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
Ophthalmology Resident Clinic, which is located on the 3rd floor right off the green elevators.

What time should students report?  
8:00 am

Who should they report to?  
Patty DeBurro

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**Goal**

To provide an overview of concepts and techniques in Ophthalmology with are essential for all physicians.

**Learning Objectives**

By the end of the rotation the student should be able to:

- Recognize the significant external and internal structures of the normal eye and perform basic examinations.
- Evaluate a patient complaining of acute visual loss and construct the differential diagnosis, recognizing those situations where urgent action is necessary.
- Have familiarity with the major causes of chronic slowly progressive visual loss in adults, namely Glaucoma, Cataract, Macular Degeneration, and be able to identify the basic characteristics of each.
- Determine whether a patient with a red eye requires the prompt attention of an Ophthalmologist.
- Evaluate common ocular and orbital injuries and determine whether the problem requires the attention of an Ophthalmologist.
- Recognize the signs and symptoms of amblyopia and strabismus. Be able to perform the necessary tests to screen for these conditions, and if the patient is a child, be aware of the need to arrange for prompt ophthalmologic consultation, particularly when intraocular disease is suspected.
- Perform a basic neuro-ophthalmologic examination and recognize and interpret the more common symptoms and signs of neuro-ophthalmologic disorders.
- Determine when a patient with diabetes requires referral to an ophthalmologist, and to become familiar with the ocular findings associated with diabetes.
- Become familiar with the ocular findings associated with systemic hypertension, thyroid disease, Sarcoidosis, Acquired Immune Deficiency Syndrome, and Herpetic Eye Disease.
Become familiar with the use of drugs to facilitate an eye examination, including how to stain the corneal surface with Fluorescein, anesthetize the cornea with topical anesthetic, and to dilate the pupils with one or more mydriatic agents.

Become familiar with the use of basic examining and testing equipment in ophthalmology including visual acuity charts, direct ophthalmoscope, hand light, and slit lamp.

**Schedule of Activities**

The clerkship will consist of approximately 50% didactic activities and skill building sessions and 50% clinical/OR time. During this period the student may be assigned to any combination of the following: a SMH full time attending practice, an Ophthalmology Resident- clinic practice, or the operating room. Students will accompany the preceptor through his/her day of practice, surgery, rounds, and conferences. During the week, the student is expected to read independently on specific topics which arise during their work week.

**Didactic Activities**

Students are required to participate in all didactic lectures. A schedule will be provided on the first day of the course.

**Required Reading**

All students are required to read "Basic Ophthalmology" by Cynthia Bradford, MD. This book provides a broad overview to Ophthalmology for the medical practitioner.

**Student Evaluations**

It is expected that the student will pass the final written and practical examinations, complete a one-page paper based on a patient encounter, turn in a patient tracker log, and complete a course evaluation. The student will also be graded on their clinical skills, reasoning, and attendance.
Course Information

Course Director
Mithra Osiris Gonzalez M.D.
Contact Person
Patty DeBurro, 273-3954
Class Year Name
Advanced Ophthalmology Elective
Class Code
OPH601
Elective Tags
Outpatient Service
Block Length
1-2 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Ophthalmology Resident Clinic. 3rd floor, right off the green elevators.
What time should students report?
9:00 am
Who should they report to?
Must Contact Patty DeBurro Prior to Scheduling

Goal

The goal for this course is for the medical student to obtain more advanced skills and knowledge in Ophthalmology. This is provided through one on one instruction with a clinician. All students must have completed the prerequisite course, Ophthalmology 600, prior to enrolling in this course. Students also need approval of the course director. Students will be required to contact the director of the course to make suitable arrangements for their elective at least one month prior to their start date.

Prerequisite - OPH600 Ophthalmology and with approval of the director.

Learning Objectives

The objectives in this course include acquiring more advanced skills for the diagnosis of Ophthalmological conditions, greater Ophthalmic knowledge, and a better understanding of the medical and surgical management of Ophthalmic conditions.

Schedule of Activities

Students will work one-on-one with a clinical provider. They will be expected to attend the clinic, operating room, and conferences attended with the clinician to which they have been assigned. Every effort will be made to match a student with a clinician who works in their area of interest.
Didactic Activities

Students will also be asked to attend the a.m. and p.m resident conferences along with the resident lecture series on Friday afternoons.

Required Reading

Students are expected to read independently throughout the duration of their experience.

Student Evaluations

Evaluations will be made based on attendance, knowledge, skills, and effort of the student. In addition, students will be expected to write a one-page paper per week of the elective. This paper should be sparked by a patient encounter which has led the student to do reading on the particular topic.
PED602 Pediatric Ambulatory Elective

Course Information

Contact Person
Marybeth Jones, 276-5168 Marybeth_Jones@urmc.rochester.edu

Class Year Name
Pediatric Ambulatory Elective

Class Code
PED602

Elective Tags
Outpatient Service, Primary Care

Block Length
1 - 4 weeks

Students
1

Prerequisites
PED300 Pediatrics Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
Monday rotation starts in the Pediatric Practice located on the 6th floor of the ambulatory center (AC6). Take the silver elevators off the main lobby

What time should students report?
9:00am

Who should they report to?
Marybeth or Outpatient chief resident

Goal

To develop skills and experience in the diagnosis and management of common pediatric illnesses and congenital disorders in a Patient-Centered Medical Home. Review the Golisano Children's Hospital (GCH) Pediatric Practice website for more information about services provided in our clinic:

https://www.urmc.rochester.edu/childrens-hospital/general-peds.aspx

Students typical participate in resident teaching conferences and spend time working with residents to provide patient care. Review the GCH Pediatric Residency website for more information about our training programs:

https://www.urmc.rochester.edu/pediatrics/pediatrics-residency.aspx

Learning Objectives

Through participation in this elective, students will have opportunity to advance skills according to the following learning objectives:

- Practice and demonstrate increasing confidence in their evaluation of children and adolescents with
acute illnesses and injuries.

- Perform the initial assessment of newborn babies and recognize common newborn conditions.
- Practice counseling new parents on the care of their child including the psychosocial adjustment of the family.
- Describe the impact of cultural and environmental factors on children's health and pediatric health care delivery, and apply this understanding to the development of individualized care management plans.
- Demonstrate concise and complete oral and written patient evaluations.
- Apply the biopsychosocial model to pediatric practice.
- Practice problem solving strategies and devise treatment plans under guidance of the supervising pediatrician.
- For common outpatient pediatric concerns, discuss appropriate clinical reasoning (i.e., evaluation of the febrile newborn), and patient management plans (i.e., determining antibiotic choices for the management of otitis media, pneumonia, and urinary tract infections).

**Schedule of Activities**

Students should email the course director at least 2 weeks before their elective to assist in designing their own schedule to meet personal learning objectives. Students will typically spend time as a part of the acute illness clinic team, though students may have opportunity to rotate with partnering subspecialty clinics and the Pediatric Emergency Department at Strong Memorial Hospital. In some cases, community pediatrician office settings can be included if sites are available and advanced arrangements are made.

**How Illness Clinic Works:**

- The illness clinic team will include 2-3 residents, 1-2 attending preceptors (which may include a fellow or a chief resident), and 1-2 students.
- Visits to Illness Clinic are typically scheduled 24-48 hours in advance, and are problem-focused/acute visits.
- Patients are checked in by the nurses, weighed, vitals taken and put in a room. The nurses write the room number, patient name, age and chief complaint on the illness board in the conference room.
- A red folder with patient identification stickers and an encounter form are placed in a rack outside every patient room. You can review information on the encounter form (it will also be entered in E-Record), and give this information to the resident or attending preceptor.
- Students should discuss each patient with an upper level or chief resident, or a fellow or attending who will also see the patient. Each morning, you can discuss the best approach to workflow with the team. Try to see any patient with interesting physical findings.
- When seeing a patient on your own, record the history and physical in a chart note, focusing on the relevant problem(s). Usually you will use a progress note (not a provider student note) that your preceptor will edit/addend and which will become a part of the permanent medical record for the patient. Clarify these expectations for written documentation with your preceptor each day.
- Each patient is presented to the preceptor and together you will formulate a working diagnosis and plan of action. Be sure all required paper work is complete the same day as the patient visit.
- Encourage patients/families to receive any overdue immunizations, and to schedule a WCC if they
are not up to date with routine care.

- The preceptor will order any needed labs, procedures, immunizations or prescriptions.

**Student expectations:**
Patient schedules/volume may change reasonable expectations each day. Clarify your role on the team and patient care responsibilities with each new preceptor every morning. Student/resident attendance at didactic activities is mandatory. The end of a morning session is often the busiest time of day. You are expected to monitor the time and leave a clinic session on time to attend these teaching activities. You are responsible for requesting specific feedback from your preceptors.

Students are expected to follow teaching schedules, attending 8:00AM morning report and Grand Rounds sessions, and report to the clinic for patient care responsibilities after these conclude (9:00AM). Patients can be registered to be seen in the clinic each day until 4:30PM. On average, members on our care team finish work by 5:30 PM, though at times, patients may have ongoing care needs or patient documentation may need to be completed later than this time.

**Didactic Activities**

A typical didactic schedule for the week includes the following activities listed below. Pediatric residents rotating with you can update you about each day’s teaching topics and any anticipated adjustments to the schedule.

**Monday:** AC6 (or other clinic location)
Report as directed after making contact with the course director for a brief orientation to your elective rotation.

**Tuesday:** Kaplan Room (1-1140)
8:00am-8:30am (Morning Report)
8:30am-9:00am (Outpatient Conference)

**Wednesday:** Whipple Auditorium (2-6424)
8:00am-9:00am (Pediatric Grand Rounds)

**Thursday:** Kaplan Room (1-1140)
8:00am-8:30am (Intern Report)
8:30am-9:00am (Outpatient Conference)

**Friday:** Kaplan Room (1-1140)
8:00am-8:30am (Morning Report)

**Every day:** Kaplan Room (1-1140)
12:00pm-1:00pm (Noon Conference)

**Required Reading**

None. BUT there are reference materials in the AC-6 Conference Room and the Bradford Library that are easily accessible for patient centered reading.

**Student Evaluations**

To receive a grade of Pass, students must participate in the conferences and clinical sessions that they have scheduled. A summary evaluation will be completed by the course director based on input from various
preceptors.
PED604 Practice Based Experience in Med-Peds

**Course Information**

Contact Person
Enrico Caiola, MD, (585) 654-5432, enrico_caiola@urmc.rochester.edu; Shandell Moreno
Shandell_Moreno@urmc.rochester.edu

Class Year Name
Practice Based Experience in Med-Peds

Class Code
PED604

Elective Tags
Outpatient Service, Primary Care

Block Length
2 weeks

Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
Culver Medical Group, 913 Culver Road, Rochester, NY 14609

What time should students report?
9 AM

Who should they report to?
Enrico Caiola, MD

**Goal**

To expose the learner to the day-to-day life of a Med-Peds practitioner in a primary care setting.

**Learning Objectives**

To experience the outpatient management of common pediatric & internal medicine problems. The secondary objective is exposure to inpatient medicine and pediatrics.

**Schedule of Activities**

Daily morning rounds with a Med-Peds attending followed by office hours paired with one of seven Med-Peds attendings seeing a mixture of adult and pediatric patients and problems.

**Didactic Activities**

Two half-hour teaching sessions per day, following the UR Med-Peds ambulatory curriculum.

**Required Reading**

None required, but Allen Gorill's Primary Care Medicine and Dershewitz's Pediatric Primary Care are strongly suggested and are available in the office, so no need to purchase them.
Student Evaluations

An evaluation will be discussed halfway through the rotation and a final evaluation will be written and submitted after it is discussed with the student. All seven attending physicians have equal input into the students evaluations.
PED610 Pediatric Developmental Disabilities

Course Information

Course Director
Abigail L.H. Kroening M.D.

Contact Person
Carolyn King, 275-3744 Carolyn_King@urmc.rochester.edu Abigail LH Kroening, MD
abigail_kroening@urmc.rochester.edu

Class Year Name
Pediatric Developmental Disabilities

Class Code
PED610

Elective Tags
Consultation Service, Multidisciplinary, Outpatient Service, Patient Care

Block Length
2 weeks

Students
1

Prerequisites
PED300 Pediatrics Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, Visiting

Where should students report?
200 East River Road Third Floor

What time should students report?
8:30 a.m.

Who should they report to?

Goal

To acquaint students with an interdisciplinary approach to the diagnosis, treatment, and coordination of care for the child, adolescent, or adult with developmental disability. Students will also become familiar with normal/abnormal development, basic management strategies for common pediatric behavior problems, and community services and their coordination.

Learning Objectives

By the end of the rotation the student should be able to:
Perform the medical part of an interdisciplinary diagnostic evaluation for a child with a developmental disability.
Describe the roles of other interdisciplinary team professionals, including psychologist, educator, nurse, social worker, speech pathologist, occupational therapist, physical therapist, audiologist, and nutritionist.
Participate in the process of care coordination for an individual with complex developmental disability.
Describe the necessary screening, diagnostic, and therapeutic tasks involved in appropriate primary care for children with spina bifida, cerebral palsy, autism, Down Syndrome, attention deficit disorder, and learning disabilities.
List differential diagnoses for intellectual disability, autism spectrum disorders, attention deficits, and motor disability in children and youth..
Discuss appropriate use of pharmacologic agents such as muscle relaxants, anticonvulsants,
psychostimulants, and other psychopharmacologic agents used in the care of children with developmental disabilities. Utilize standard developmental screening tools and recognize when further evaluation or developmental intervention is necessary.

**Schedule of Activities**

Students will participate in all clinical activities of the Division of Developmental and Behavioral Pediatrics, including our Developmental and Behavioral Pediatrics Clinic (formerly known as Kirch Center), as well as visiting community agencies such as schools, residences, and other clinics for guided observations and patient screenings/work-ups. Students electing longer rotations will have more opportunities for higher level clinical interaction. Students should contact Dr. Abigail Kroening (abigail_kroening@urmc.rochester.edu) if they are interested in an elective of 2-4 weeks duration. Students should also contact Dr. Kroening directly if they are interested in taking this elective during dates that are not already established as a 2-week block session. We do our best to accommodate these requests!

**Didactic Activities**

Weekly Developmental and Behavioral Pediatrics Core Lecture Series on research and leadership in the care of children with Developmental Disorders; weekly pediatric discipline conference; computer-aided instruction; individualized teaching; and (for students electing experiences longer than 2 weeks) a brief, informal talk based on reading on a related subject of the student’s choice.

**Required Reading**

Handbook of Developmental and Behavioral Pediatrics, 3rd ed, handouts.

**Student Evaluations**

Students will be evaluated based on the quality and completeness of their patient workups (Objectives 1, 4, 5, 6), their ability to participate as members of interdisciplinary teams (Objectives 2, 3), and on their informal talks (Objectives 1-7).
**Course Information**

Course Director  
Katherine Blumoff Greenberg M.D.  
Contact Person  
Nadine Manns, 275-0416 nadine_manns@urmc.rochester.edu  
Class Year Name  
Adolescent Medicine  
Class Code  
PED615  
Elective Tags  
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care  
Block Length  
2 weeks  
Students  
1  
Prerequisites  
(ALL) PED300 Pediatrics Clerkship, PSY300 Psychiatry Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
8 South Unit  
What time should students report?  
9AM  
Who should they report to?  
Attending on-call via webpaging or calling 275-2964

**Goal**

To introduce students to the particular interests and issues surrounding the unique health care needs of adolescent patients, and start to develop the knowledge, skills, and self-efficacy for both primary and specialty care of adolescent patients.

**Learning Objectives**

Individualized learning objectives will be developed by learners at the outset of their rotation; a comprehensive list of potential learning objectives can be found on the course's Blackboard site.

**Schedule of Activities**

This elective is structured into inpatient and outpatient experiences. Mornings are generally spent at Golisano Children's Hospital, doing patient rounds and consults. The afternoons are spent at different clinical sites, within URMC clinical and in the community. The schedule for clinical assignments will be sent to the students via email the week prior to starting the elective.

**Didactic Activities**
The students are also expected to attend adolescent medicine didactic sessions that take place over the course of the week. Please refer to the schedule.

**Required Reading**

The course Blackboard site provides access to a set of rotation-specific required and optional online educational experiences, including readings, webinars, and video series.

**Student Evaluations**

To receive a grade of Pass, students must attend clinical sessions, demonstrate enthusiasm, and be open to feedback and learning. The student should demonstrate increasing communication skills and knowledge of adolescent health. There is also a required student presentation at the end of the rotation. Details regarding the presentation will be sent along with other materials a week in advance.
PED620 Pediatric Gastroenterology/Nutrition

Course Information

Contact Person
Rishi.Gupta@urmc.rochester.edu Marcy Inglese 275-3863

Class Year Name
Pediatric Gastroenterology/Nutrition

Class Code
PED620

Elective Tags
Patient Care

Block Length
1 - 2 weeks

Students
1

Prerequisites
PED300 Pediatrics Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Pediatric GI/Nutrition Division 4-6112A or Division Chief office

What time should students report?
9:00 AM

Who should they report to?
7 South residents sign out room at Golisano Children's Hospital

Goal

To become more familiar with the practice of Pediatric Gastroenterology, Hepatology and Nutrition, an essential pediatric subspecialty

https://www.urmc.rochester.edu/childrens-hospital/gastroenterology.aspx

Learning Objectives

By the end of the rotation the student should be able to:
1.) Be able to identify patients for whom consultation with a pediatric gastroenterologist is indicated.
2) Have had experience of seeing patients in the outpatient or inpatient setting with the following diagnoses: Constipation/encopresis, gastroesophageal reflux, chronic inflammatory bowel disease, chronic abdominal pain.
3) Have read about a few common topics in Pediatric GI/Nutrition

4. Will be able to observe Endoscopy/ Colonoscopy procedures

Schedule of Activities

Students will follow a few inpatients, and assist in the outpatient clinics. They will observe procedures such as upper endoscopy and colonoscopy. The student will be encouraged to give a talk on a Pediatric GI topic.
**Didactic Activities**

Students will attend Pediatric Morning report and Pediatric Grand Rounds. They are also expected to attend the weekly Pediatric Nutrition Support Service Rounds, weekly adult GI Clinical Conference, the biweekly Pediatric GI Pathology Conference, and the biweekly Pediatric GI/Nutrition Fellows conference.

**Required Reading**

Suggested Reading: The URL below will take you to Wylie’s text of Pediatric Gastroenterology- the chapters suggested are 12: Constipation and Encopresis, 14: Gastrointestinal Bleeding, 22: Gastroesophageal Reflux, 35: Celiac Disease, 38: Allergic GI Disorders, 44 and 45: Inflammatory Bowel Disease, 55: Hirschsprung’s Disease, 69: Biliary Atresia and 85: Nutrition.

Further reading is encouraged regarding specific patient topics, as well as the major texts: Pediatric Gastrointestinal Diseases Volumes 1 & 2, Allan Walker, and Pediatric Liver Disease by Fred Suchy.


**Student Evaluations**

The student will be evaluated on interest, enthusiasm, and participation in learning the skills important in the diagnosis and management of pediatric GI diseases. The student should show ability to perform literature searches on interesting patient topics.
PED625 Pediatric Intensive Care

Course Information

Course Director
Jake J. Deines M.D.
Contact Person
Shelley Weekes Shelley_Weekes@URMC.Rochester.edu
Class Year Name
Pediatric Intensive Care
Class Code
PED625
Elective Tags
Inpatient Service, Patient Care
Block Length
2-4 weeks
Students
1
Prerequisites
PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Pediatric ICU (Golisano Children’s Hospital 6th Floor North)
What time should students report?
7:30 AM
Who should they report to?
PICU Attending on service (Phone 273-2303)

Goal

To acquaint the student with the approach to a critically ill infant, child, or adolescent and to understand the rationale for the initial treatment of critically ill pediatric patients with common disease processes.

Learning Objectives

By the end of the rotation the student should be able to:

- Identify pediatric patients with shock when they present. Discuss the common causes of shock in the pediatric patient, their pathophysiology, and the initial treatments for children in shock.
- Identify pediatric patients with respiratory failure when they present. Discuss the common causes of respiratory failure in the pediatric patient, their pathophysiology, and the initial treatments for children with respiratory failure.
- Identify neurologic disease that requires intensive care therapies in pediatric patients. Discuss the common neurologic crises that occur in the pediatric patient, their pathophysiology, and their initial treatments.
- Understand the principles of positive pressure mechanical ventilation in pediatric patients. Be able to
differentiate between pressure and volume modes of mechanical ventilation.

- Be able to analyze blood gas results; understand acid-base disorders.
- Describe the effects of critical pediatric illness on parents and families.

Learn more about Pediatric Critical Care:

Learn more about our Pediatric Residency Program:
https://www.urmc.rochester.edu/pediatrics/pediatrics-residency/our-residents.aspx

Visit our Department website to learn more about Pediatrics at URMC:
https://www.urmc.rochester.edu/pediatrics.aspx

## Schedule of Activities

Students will function as members of the care team in the PICU. They will be responsible for the direct care (under close supervision) of one or more patients. They will round with the care team (at 7:30 a.m. on weekdays) and provide care during the remainder of the day. They will attend the daily teaching conference and afternoon sign-out rounds. Each student will present at this conference once during their rotation. This presentation will make reference to a specific interesting patient. Support and guidance about this presentation is available from members of the PICU faculty. Every third or fourth night call is optional, but is strongly encouraged.

## Required Reading

Resource reading material is available in the PICU. Readings will be patient-focused, and will concentrate on making clear evidenced-based approaches to the care of patients. The two major texts in Pediatric Critical Care are: Pediatric Critical Care (Fuhrman and Zimmerman); Textbook of Pediatric Intensive Care (Rogers). These books are available in the intensive care unit.

## Student Evaluations

To receive a grade of pass, students must participate in the PICU program and demonstrate a beginning understanding of pediatric critical illness.
**Course Information**

Course Director  
Karen Zuidema Voter M.D.  
Contact Person  
Karen_Voter@urmc.rochester.edu  
Class Year Name  
Pediatric Pulmonology  
Class Code  
PED628  
Elective Tags  
Patient Care  
Block Length  
2 weeks or 4 weeks with prior approval  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  
Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Rm : 4-3236  
What time should students report?  
08:30 am  
Who should they report to?  

**Goal**

To diagnose and provide care for children with difficult asthma, cystic fibrosis, bronchopulmonary dysplasia and technology dependence.

**Learning Objectives**

By the end of the rotation the student should be able to:  
Perform relevant history and physical examinations for pulmonary diagnoses, interpret pediatric pulmonary function tests, and appreciate indications for bronchoscopy in children. The student should be able to develop a differential diagnoses and preliminary treatment plan for children with pulmonary diagnoses.

**Schedule of Activities**

Attend Pediatric Pulmonary Clinics in ACF-1 three half-days per week (1:00-5:00 p.m. on Tuesdays.  
8:30-12:00 a.m. on Monday, and Thursdays ) and one half day per week at the Mary Parkes Asthma Center (8:30 - 12 on Fridays), make rounds daily on hospitalized patients and consults on hospitalized children with respiratory disorders.

**Didactic Activities**
Attend Pediatric Morning Report (daily, 8:00-8:30 a.m.), and Pediatric Pulmonary Interdisciplinary Rounds (Mondays, 1:00-2:00 p.m., Tuesdays, 12:00-1:00 pm, and Thursdays 1:00-2:00), attend Pulmonary Teaching Conference on Wednesdays 1:00 - 2:00 pm and attend Radiology rounds Wednesdays 11:00 - 11:30.

Required Reading

A core reading notebook located in the Pediatric Pulmonary Conference Room has articles on key and basic topics in pediatric pulmonology. This info is also stored on S: Drive

To learn more about Pediatric Pulmonology, visit our website: urmc.rochester.edu/pediatrics/pulmonology

For more information on pediatric education, please visit our websites:

Pediatric Residency Program: urmc.rochester.edu/pediatrics/pediatrics-residency

Department of Pediatrics: urmc.rochester.edu/pediatrics

Student Evaluations

Evaluations will be completed by the attending physician in clinic and on the inpatient service based on the student's ability to evaluate and follow patients with lung disease.
PED630 Pediatric Nephrology

**Course Information**

Course Director
Megan Johanna Rashid M.D.
Contact Person
Erik Abell Ph: 585-273-2977 Email: Erik_Abell@urmc.rochester.edu Kimberly Marino Ph 585-275-9784

Class Year Name
Pediatric Nephrology
Class Code
PED630
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care

Block Length
2-4 weeks

Students
1

Prerequisites
PED300 Pediatrics Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
URMC Room 4-8116

What time should students report?
08:30

Who should they report to?
Erik Abell

**Goal**

To better understand the diagnosis and management of acute and chronic kidney disease, hypertension, and fluid/electrolyte problems in children.

Be exposed to children with kidney transplants, those on hemodialysis and peritoneal dialysis, and those with acute kidney injury.

Become familiar with renal diagnostic tests including urinalysis, renal electrolyte handling, kidney ultrasound, kidney biopsy, and measurement/estimation of glomerular filtration rate.

**Learning Objectives**

By the end of the rotation the student should be able to:
- Identify patients for whom consultation with a pediatric nephrologist is indicated.
- Attempt to focus on specific aspects of diagnosis and management.
- Become familiar with basic aspects of fluid and electrolyte disturbances, as they relate to renal and nonrenal patients.
- Develop familiarity in analyzing urine under the microscope.
- Become familiar with normality in growing children as it pertains to blood pressure, protein excretion, and growth and development.
- Become familiar with the most common types of referrals to a pediatric nephrology practice, including the
diagnosis of persistent microscopic hematuria and proteinuria.
- Develop a familiarity in reviewing renal ultrasounds.
- Become familiar with end-stage renal patients, particularly those who have been transplanted or are on peritoneal/hemodialysis.
- Become acquainted with non-dialytic modes of supporting renal insufficient children during growth.
- Better understand the relevance of adequate renal function in the process of growth and development in children.

Schedule of Activities

Students are assigned to SMH under the direction of the faculty member and/or fellow on service from approximately 8 a.m. to 5 p.m. on weekdays. The student will participate in rounding on inpatients, compiling a summary of the results in the past 24 hours with recommendations for subsequent diagnosis and management in consultation with the faculty member. On one or two mornings per week, the student will participate in outpatient clinic, seeing patients, making his/her own formulations prior to reviewing and seeing the patient with an attending nephrologist. During outpatient clinic the student will have an opportunity to review the urinalysis on each patient that he/she has seen with the help of the faculty member.

Didactic Activities

The students are expected to attend major divisional educational conferences, including weekly clinical conferences and journal clubs as well as monthly scheduled conferences when they occur, including Pediatric Renal/GU, research, and pathology conferences.

Required Reading

A syllabus of major important articles to the pediatric nephrology literature is available on loan from the divisional secretary in 4-8116, ext. 5-9784.

Student Evaluations

Students will receive a satisfactory evaluation if they keep a log noting that they have seen each of the inpatients and at least three outpatients per week and that they have indicated that they have learned about each of the specific objectives listed above, and, finally, that they have read at least ten articles from the syllabus provided by the division.
### Course Information

Contact Person  
Chin-To Fong, MD  
Class Year Name  
Pediatric Genetics  
Class Code  
PED635  
Elective Tags  
Consultation Service, Inpatient Service, Outpatient Service  
Block Length  
Minimum 2 weeks, 4 weeks preferred  
Students  
2  

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Please check with Dr. Fong by email the week prior to the elective  
What time should students report?  
Please check with Dr. Fong by email the week prior to the elective  
Who should they report to?  
Please check with Dr. Fong by email the week prior to the elective

### Goal

To understand the applications of genetic principles in medical practice.  
To gain familiarity with common genetic conditions. To experience all aspects of clinical genetics including genetic counseling, prenatal genetics, inborn errors of metabolism and dysmorphology. Although listed as a pediatric elective, this elective will offer experience in genetic practice in a wide range of age groups and specialties.

### Learning Objectives

By the end of the rotation the student should be able to:  
Obtain an accurate three generation pedigree.  
Obtain an appropriate genetic history.  
Observe and understand the genetic physical examination.  
Understand the role of genetic testing in diagnosis.  
Observe genetic counseling in several situations including prenatal diagnosis and clinical dysmorphology.  
Assist with inpatient consultations.  
Demonstrate use of the genetic literature.  
Understand the concepts of alpha-feto-protein testing, chromosome testing, DNA testing and other genetic testing.  
Develop an area of interest and present a 15-30 minute presentation on this topic or develop a case report for publication.
### Schedule of Activities

Pediatric General Genetics Clinic Monday afternoon, Wednesday morning and afternoon

Inherited Metabolic Disorders Clinic Monday afternoons or Tuesday mornings

Cancer Genetics Clinic: Thursday and Friday afternoons

Pediatric Cardiogenetics Clinic: first Wednesday afternoon of each month

Medical Genetic Clinic: Thursday afternoon

Craniofacial Team Clinic: every other Friday

Various meetings: Thursday mornings, and at other times subject to change

### Didactic Activities

Ad hoc lectures

### Required Reading

A syllabus will be provided.

### Student Evaluations

The student should participate in patient care and discussions to demonstrate a growing expertise in genetics, be available for consultations, research patient problems encountered during the rotation, and present a topic of interest in Genetic rounds.
PED643 Pediatric Cardiology

**Course Information**

Course Director
Cecilia C. Meagher M.D.

Contact Person
Susan Aldridge, susan_aldridge@urmc.rochester.edu

Children's Heart Center at URMC Clinic 275-6108

Class Year Name
Pediatric Cardiology

Class Code
PED643

Elective Tags
Outpatient Service

Block Length
2 or 4 weeks

Students
1

Prerequisites
PED300 Pediatrics Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
If Monday: conference room 4-5210 at 7:30 AM
Otherwise: Children's Heart Center, rm 1-0349 (Pediatric Cardiology clinic)
Ambulatory building off main hallway of SMH Lobby.

What time should students report?
7:30 AM

Who should they report to?
Cecilia Meagher, MD

**Goal**

To understand how to distinguish normal from abnormal cardiovascular signs and symptoms, understand how to recognize, manage, and, if necessary, refer cardiovascular conditions in children, understand key principles related to the use of cardiovascular drugs, and understand the role of prevention of cardiovascular disease in pediatric patients.

**Learning Objectives**

By the end of the rotation the student should be able to: Recognize normal age-related changes in heart rate and blood pressure.

1. Describe the mechanisms of production of heart sounds and murmurs and recognize classic auscultatory findings of innocent and pathologic murmurs.

2. Differentiate between physiologic and pathologic variations in cardiac rhythm.

3. Describe the normal perinatal circulation and its influence on the development of signs and symptoms of heart disease in the neonate.
4. Describe the use and indications for electrocardiography, echocardiography, exercise testing, ambulatory electrocardiographic monitoring and cardiac catheterization.

5. Identify and describe the management of functional heart murmurs, musculoskeletal chest pain, and mild labile hypertension.

6. Describe the initial evaluation and management of the child presenting with serious signs and symptoms related to the cardiovascular system such as cyanosis, palpitations and/or arrhythmias, congestive heart failure, syncope, abnormal heart sounds, and pathologic murmurs.

7. Describe the physical findings, pathophysiology, genetics, usual treatments, and prognosis for common cardiovascular conditions including ventricular septal defect, atrial septal defect, tetralogy of Fallot, patent ductus arteriosus, coarctation of the aorta, aortic and pulmonary stenosis, mitral valve prolapse, supraventricular tachycardia, Kawasaki disease, acute rheumatic fever, bacterial endocarditis, and cardiomyopathy.

8. Recognize the risk factors and identify appropriate screening and prevention strategies for atherosclerotic Heart disease.

**Schedule of Activities**

The student will participate in all activities and conferences of the division including time in the outpatient clinic, inpatient consultations, observation/participation in performing electrocardiograms, exercise testing, echocardiography. Opportunity will be provided to observe in the cardiac catheterization lab and operating room.

**Didactic Activities**

Students are expected to read about and discuss the learning objectives with their mentor throughout the rotation. In addition, students are expected to attend all the daily Pediatric Cardiology Conferences, all which are held in the morning: Monday Changeover, Tuesday Echo conference, Wednesday Fellows conference, Thursday, Cardiovascular Care Conference and Friday, Surgery conference.

**Required Reading**


**Student Evaluations**

To receive a grade of pass, students must have demonstrated active participation in the clinical activities of the division, and in consultation with the pediatric cardiology attending on service, document that the learning objectives have been covered and met.
PED645 Pediatric Infectious Diseases

**Course Information**

Course Director  
Francis Gigliotti M.D.  
Contact Person  
Nadine Manns Nadine_Manns@URMC.Rochester.edu  
Class Year Name  
Pediatric Infectious Diseases  
Class Code  
PED645  
Elective Tags  
Consultation Service, Patient Care  
Block Length  
2 - 4 weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Medical Center, Room 4-8144  
What time should students report?  
9:00 am  
Who should they report to?  
Peds ID Monday at 9 a.m. Hoekelman Rm 4-8144. Please see attending physician(s)

**Goal**

To become familiar with and gain an initial understanding of the practice of Pediatric Infectious Diseases


https://www.urmc.rochester.edu/pediatrics/pediatrics-residency.aspx

**Learning Objectives**

Explain the symptoms and physical findings that suggest the presence of an infectious disease and perform a PE appropriate for an ID consult.

Take an exposure history that provides clues to a specific diagnosis (ill contacts, travel, pets or other animal exposures, occupation, insect bites and diet).

Identify standardized guidelines for diagnosis and treatment of conditions common to this subspecialty area and adapt them to the individual needs of specific patients (i.e. catheter assoc infect guidelines)

Relate the importance of proper specimen collection and its effect on results, explain the limitations of those
tests (sensitivity, specificity, predictive values, cost).

**Schedule of Activities**

1) Daily work rounds and teaching rounds with the Attending and Peds ID team.
2) Conference participation including Pediatric Morning Report (twice per week), and weekly Peds ID clinical conference, and joint Medicine and Pediatric ID clinical conference.

**Didactic Activities**

As above, Peds ID clinical conference and joint Medicine and Pediatric ID clinical conference.

**Required Reading**

Selected papers on important and/or frequent clinical problems encountered in Peds ID are available on the Pediatric Shared drive for the residents and medical students to read. In addition, daily reading based upon questions related to ongoing patient care is expected.

**Student Evaluations**

Students will be evaluated by the Pediatric ID attending using the standard format provided by the School of Medicine. In addition, verbal feedback will be provided on an on-going basis by the residents, fellow, and attending on the service as applicable.
Course Information

Course Director
Craig A. Mullen M.D., Ph.D.

Contact Person
Craig Mullen craig_mullen@urmc.rochester.edu phone 273-5372
Gladys Magee
Gladys_magee@urmc.rochester.edu 585-275-0798

Class Year Name
Pediatric Hematology/Oncology

Class Code
PED647

Elective Tags
Inpatient Service, Outpatient Service, Patient Care

Block Length
2 weeks

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Ambulatory Care Facility (AC-6) on the 6th floor

What time should students report?
8:30 AM

Who should they report to?
The Pediatric Hematology/Oncology clinic attending physician

Goal

To provide an intensive experience in clinical Pediatric Hematology/Oncology in which students will acquire an understanding of the diagnosis, pathophysiology, and management of the common hematologic and oncologic diseases of childhood with an appreciation for the effect of these serious diseases on the patients and their families.

Learning Objectives

By the end of the rotation the student should be able to:

Explain the physiology of normal blood formation and destruction.

Accurately diagnose common causes of cytopenias (i.e., neutropenia, anemia, thrombocytopenia) in children. Given history and physical exam, efficiently utilize laboratory tests in the diagnostic work-up and be able to evaluate a blood smear.

Describe the pathophysiologic mechanisms of the anemia and the different types of crises in sickle cell disease.

Describe in a step-wise manner, the work-up for a prolonged PTT, a prolonged PT, and a prolonged bleeding time. Accurately apply the various bleeding tests in the light of the patient history and physical findings.

Describe childhood ALL in terms of its incidence, peak age range, common signs and symptoms and general treatment concepts. Explain how prognostic factors have been used to define tailored therapy for ALL.

Be familiar with common forms of cancer in children in terms of peak age, clinical presentation, staging and common sites of metastatic spread. These forms of cancer include Wilms tumor, Non-Hodgkin and Hodgkin Lymphoma, Neuroblastoma, Osteogenic Sarcoma, Ewings sarcoma family of tumors, Rhabdomyosarcoma,
Medulloblastoma and other brain tumors
Describe a blast cell and be able to differentiate between a blast cell and reactive lymphocyte, and be familiar
with the morphology of hematopoietic cells.
Using clinical and laboratory data, differentiate between ALL and ITP, acute mononucleosis and iron
deficiency anemia.

**Schedule of Activities**

Students work on the outpatient (AC-6) and inpatient (4th floor SMH) service of the Pediatric
Hematology/Oncology. Clinic is currently scheduled Mon, Wed and Thurs 8:30-5:00, Tues and Fri
8:30-1:00. Students perform initial consultations (history, physical, collect lab data, followed by presentation
to attending, including impression and plan. Also may be responsible for dictating patient care note.)
and follow-up evaluations in clinic, with an attending preceptor. They may also attend inpatient rounds each
morning, see inpatient consults as appropriate, and may see limited inpatients with the attending. The
elective is primarily outpatient based. Students who desire a more intensive inpatient experience may apply
to do a externship on the Pediatric Heme/Onc service. Emphasis is on active participation in all aspects of
patient care.

**Didactic Activities**

Inpatient housestaff rounds (Tue-Fri 7:30-8:30 am), Morning report (Tue., Th., Fri. 8:30-9:00 a.m.); Attending
Rounds (scheduled with each housestaff rotation); Academic conference (variable Tues. 3:00-4:00 p.m.);
Sign-in Conference (Mon. 8:00-9:00 a.m.). Patient conference (Fri., 3:30-5:30 p.m.)

**Required Reading**

Textbooks can be borrowed from the Peds Hem/Onc Library. Principles and Practice of Pediatric Oncology
2nd ed., by P. Pizzo and D. Poplack (also on line); Hematology of Infants and Children, 5th ed. By D. Nathan
and F. Oski.

**Student Evaluations**

To receive a grade of pass, students must receive a satisfactory clinical evaluation from their preceptors
during the elective. It is preferred that student's also do a short presentation at one of the division clinical
conferences or housestaff teaching sessions.
Course Information

Course Director
David R. Weber M.D., M.S.
Contact Person
David Weber david_weber@urmc.rochester.edu 585-275-7744
Class Year Name
Diabetes Camp/Aspire
Class Code
PED648
Elective Tags
Outpatient Service
Block Length
1 or 2 weeks
Students
3
Prerequisites
PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Camp is held at the Rotary Sunshine Camp; Rush, NY. Information will be sent about training, and when to report.
What time should students report?
Information will be provided
Who should they report to?
Camp medical coordinator

Goal

Elective Goals:

Camp Dates:
Session 1: July 5-10
Session 2: July 12-17

Students will reside on campus during the week of camp and must commit to arrive at 8:00 AM on the first day of camp to complete training

A maximum of 10 students per week will be accepted on a first come, first serve basis. Exposure to Pediatric and adolescent diabetes management in a camp setting. Involvement in glucose and calorie intake and general diabetes management in children and adolescents. Hours are daily 7am to 9:30PM on most days with one or two overnight “calls” per week. Meals provided. Every evening 5-8 PM, rounding and review of glucose records and insulin orders on all campers. Didactic sessions with endocrinologist and literature review will be supplied during the elective

After signing up for the credits and completing the online application, interested students should
email Dr. Weber with date preference

Learning Objectives

diabetes management in children and adolescents

Schedule of Activities

Details will be provided.

Didactic Activities

Early evening, 90 minutes: discussion and glucose and insulin review.

Required Reading

will be provided at camp

Student Evaluations

written, if desired.
PED649 Pediatric Endocrinology

Course Information
Course Director
Craig Charles Orlowski M.D.
Contact Person
Nadine Manns Nadine_Manns@urmc.rochester.edu (585) 276-4228
Class Year Name
Pediatric Endocrinology
Class Code
PED649
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care
Block Length
2 weeks
Students
1
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
room 4-6230
What time should students report?
8:30 am
Who should they report to?
Craig Orlowski

Goal
To expose the student to a wide variety of pediatric endocrine disorders.

Learning Objectives
Normal growth patterns for infants, children and adolescents. The student will become familiar with the differential diagnosis of disturbances of growth. The student will become familiar with hormones that influence growth rates, such as growth hormone, thyroid hormone, glucocorticoid, and hormone sex steroids. Finally, the student will become familiar with modes of administration, indications and potential side effects of growth promoting therapy.
The student will become familiar with the physiology of the posterior pituitary, with specific attention to the role of vasopressin. The differential diagnosis of diabetes insipidus will be discussed, as well as the modes of therapy.
Role and regulation of thyroid hormone. Thyroid function tests will be discussed, along with tests for the integrity of the hypothalamic pituitary thyroid axis. The differential diagnosis of hypothyroidism and hyperthyroidism and the various forms of therapy will be discussed. The student will be taught how to recognize signs and symptoms of thyroid disease. Didactic sessions will be devoted to exposing the student to the broad range of phenotypic findings in thyroid disease.
Diabetes. Etiology, genetics, and pathogenesis of Type I and Type 2 diabetes will be discussed. The diagnosis and treatment of diabetic ketoacidosis will also be discussed. The inpatient and outpatient management of diabetes will be carefully reviewed. The long-term outcome of diabetes in children as well as future directions will be reviewed.
Disorders of the adrenal cortex. The pathophysiology of disorders of adrenal steroidogenesis resulting in
congenital adrenal hyperplasia will be discussed. Biochemical and clinical features of each of the disorders will be discussed. The signs and symptoms, laboratory tests and treatment for Cushing syndrome and Addison disease will be reviewed.

Disorders of pubertal development. Normal variations in developmental patterns and abnormal pubertal development (early or delayed) will be discussed. Tanner staging will be carefully reviewed. The effect of excess or deficient adrenal or gonadal steroids will be reviewed.

Disorders of sexual development in the newborn infant. Normal sexual differentiation will be reviewed, followed by a discussion of gonadal or chromosomal disorders of sexual differentiation and their biochemical and phenotypic consequences.

Parathyroid and vitamin D-related disorders. Parathyroid physiology will be discussed and clinical entities including hypoparathyroidism and hypocalcemia or hyperparathyroidism will be discussed, along with their modes of therapy.

Schedule of Activities

Students will participate in all inpatient and outpatient pediatric endocrine activities. The students will participate in outpatient endocrine clinics on two half-days per week and pediatric diabetes clinics on one full day per week, as well as journal clubs and clinical conferences. The student will act as the primary source for all consultative and inpatient clinical work.

Didactic Activities

Students are expected to read about and discuss the learning objectives with their preceptor during the day.

Required Reading

Selected chapters in Clinical Pediatric Endocrinology, 2nd Ed., Editor: Solomon A. Kaplan and additional reading material is supplied by the preceptors.

Student Evaluations

The preceptor writes evaluation of the student. It is based on an assessment of fund of knowledge, acquisition of new knowledge, and improvement in reasoning ability and over.
PED650 Pediatric Neonatology

Course Information

Course Director
Robert John Swantz M.D.
Contact Person
Dr. Robert Swantz, 275-2972, robert_swantz@urmc.rochester.edu
Class Year Name
Pediatric Neonatology
Class Code
PED650
Elective Tags
Inpatient Service
Block Length
2
Students
1
Prerequisites
(ALL) OBG300 Obstetrics and Gynecology Clerkship, PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Neonatal ICU (NICU), at Golisano Children’s Hospital - 3rd floor
What time should students report?
7:15am
Who should they report to?
Neonatology Fellow

Goal

To understand how to resuscitate and stabilize a critically ill neonate, to appreciate the pathophysiologic basis for common disorders of the newborn, and to understand how to evaluate and manage common diseases of the newborn.

Learning Objectives

By the end of the rotation the student should be able to:

- Describe the physiologic adaptation of the newborn to extrauterine life and the steps in neonatal resuscitation and stabilization.
- Demonstrate proper and effective delivery room resuscitation techniques for newborns.
- Perform an appropriate assessment (history, physical examination and initial diagnostic studies) and formulate a differential diagnosis for the following common signs and symptoms: prematurity, growth failure, respiratory distress, cyanosis, heart murmur, apnea/bradycardia, abdominal distension, hepatosplenomegaly, dysmorphic features, hypoglycemia, jaundice, anemia, and thrombocytopenia.
- Describe the pathophysiologic basis of and key principles of management for the following common conditions: respiratory distress syndrome, transient tachypnea, pneumonia, aspiration,
bronchopulmonary dysplasia, congenital heart disease, infant of diabetic mother, hyperbilirubinemia, neonatal sepsis, necrotizing enterocolitis, apnea of prematurity.

- Explain the indications for ordering, and interpret the results of the following laboratory and radiology tests: CBC/differential, hematocrit, blood type, Coomb's, serum electrolytes, fractionated bilirubin, blood gas, EKG, urinalysis, bacterial/viral cultures of blood/CSF/urine, CSF cell count, serologic tests, neonatal drug screening, NYS newborn screen, chest/abdomen radiographs, and head ultrasound.
- Discuss the indications for, and appreciate the techniques in performing the following procedures: physiologic monitoring, endotracheal intubation, mechanical ventilation, venipuncture, arterial puncture, umbilical catheterization, urethral catheterization, lumbar puncture, phototherapy, pulse oximetry.
- Communicate and work effectively with members of the NICU patient care team, and with parents and families of critically ill neonates.

**Schedule of Activities**

The student is assigned to the GCH Neonatal Intensive Care Unit and works with the housestaff team. The student will function as an acting intern, assuming primary responsibility for his/her patients under the supervision of the housestaff, neonatology fellows, and attending neonatologist. The student will work M-F, 6:00am-6:00pm.

NOTE: If you are interested in taking the elective between Feb-June, please contact the elective director, Dr. Robert Swantz.

**Didactic Activities**

Students will participate in the daily educational activities for the pediatric housestaff in the NICU, including morning report, attending rounds, bedside work rounds, radiology conference, and sign-out rounds. Additionally, the student will attend the weekly perinatal conference, fellows conference, and health team rounds.

**Required Reading**

A variety of instructional materials are available: "NICU Survival Guide" and numerous neonatology textbooks electronically through Miner Library. In addition the URMC Intranet NICU Website has direct links to Housestaff Guidelines and orientation information.

**Student Evaluations**

The student will review their experience with the attending neonatologists. To receive a grade of satisfactory, the student must be judged by them to have appropriately achieved the learning objectives.
Course Information

Contact Person
Rosa Lloyd x3-3737 rosa_lloyd@urmc.rochester.edu Kelly McDermott x3-5942
Kelly_mcdermott@urmc.rochester.edu

Class Year Name
Community Health & Advocacy Elective (CARE)

Class Code
PED661

Elective Tags
Multidisciplinary

Block Length
2 weeks

Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Rosa Lloyd x3-3737 rosa_lloyd@urmc.rochester.edu Kelly McDermott x3-5942
Kelly_mcdermott@urmc.rochester.edu

What time should students report?
TBD based on individual student experience

Who should they report to?
Rosa Lloyd or Kelly McDermott

Goal

- To enhance knowledge of community health
- To practice and learn new skills in community health leadership
- To design a community health project in collaboration with community-based partners
- To become lifelong leaders committed to improving the health of all children and families

Learning Objectives

By the end of the rotation, the student(s) will have enhanced knowledge, attitudes, skills & habits in the areas listed below

* Identifying upstream determinants of health; establishing causality between risk factors and diseases; Global health priorities.

* Brainstorming; Establishing relationships with community-based partners; Designing projects.

* Public speaking; talking to the media.

* Critical thinking about evidence-based community health action.
Schedule of Activities

Please note that our annual 2-week Community Health & Advocacy Resident Education (CARE) block only occurs once a year. It will be held July 20 - July 31, 2020. Click [here](#) for a typical 2-week block schedule.

It is necessary to obtain prior approval from Dr. Aligne by contacting him at Andrew_Aligne@URMC.Rochester.edu

If you are approved and still interested, please contact either Kelly_McDermott@URMC.Rochester.edu or Rosa_Lloyd@URMC.Rochester.edu at your earliest convenience.

Didactic Activities

Series of lectures/workshops will/can include:

* Population Perspectives on Health and Disease
* Evidence-Based Public Health
* Moving from the Clinic to the Community
* Working with CBOs (Community-based organizations)
* Mini-Proposal Writing
* Going Upstream/Project Planning
* Mind-Mapping/Brainstorming
* Grant-writing
* Public Speaking/One-Minute Talks
* How to Speak to the Media
* Behavior Change
* Leadership/Change the World
* Teamwork
* Advocacy: Letter Writing, etc.
* Evaluation of Programs
* Global Health

Required Reading

The CARE Track Handbook: Leadership in Community Pediatrics (provided). Additional articles and books
available, but not required for participation.

**Student Evaluations**

Will formulate an evaluation to be set-up on the Medhub system
**Course Information**

Course Director  
Marc Sean Lavender M.D.

Contact Person  
Rosa Lloyd Rosa_Lloyd@urmc.rochester.edu x3-3737 (Rosa)  
Kelly McDermott Kelly_mcdermott@urmc.rochester.edu x3-5942 (Kelly)

Class Year Name  
Medical Student Links with the Community

Class Code  
PED662

Elective Tags  
Multidisciplinary, Teaching

Block Length  
2 wks - Students must contact Rosa Lloyd to be approved for the dates requested

Students  
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
Hoekelman Center room: 4-5215

What time should students report?  
9 a.m.

Who should they report to?  
Rosa Lloyd or Kelly McDermott

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**Goal**

The goal of this rotation is to inspire and enable medical students to participate in community-based partnerships, evidenced-based programs and advocacy to improve the health of children, adults, and families.

As health care providers, we recognize that our common responsibility is to help maintain the health of all children and their families. Our challenges include poverty, violence, social isolation, and lack of healthy environments in which to play, to name a few. We believe that by connecting children and families to available community resources, our ultimate goal may be realized - that all children achieve their fullest human potential.

Students must contact Rosa Lloyd to be approved for the dates requested. Given the complexities of creating course schedules, students are expected to be committed once assigned to the elective to avoid last-minute drops.

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**Learning Objectives**

At the conclusion of this rotation, you should:

- Have a better sense of the community-based resources available to patients and families living in the City of Rochester & Monroe County.
Feel competent in your ability to refer your patients and their families to community-based resources.

Feel competent in your ability to advocate on behalf of patients and families in your practice.

**Schedule of Activities**

During their 2 week rotation, each participant will:

- visit between 10 and 15 community-based organizations/programs
- participate in didactic activities
- complete the required assignments

This rotation requires the student to provide his/her own transportation.

**Didactic Activities**

Students will participate in the following didactic experiences while on rotation:

- Orientation session
- Wrap-up/closing session

**Required Reading**

Please go to [www.plccare.org](http://www.plccare.org) and click on "Intern Community Rotation" to access all course materials including readings, assignments, and community resources.

**Student Evaluations**

- Students are expected to evaluate their rotation experience to help us improve the course for future participants.
- Students will be evaluated by the Course Director at the completion of the block.
Course Information

Course Director
Syed Shahzad Mustafa M.D.
Contact Person
S. Shahzad Mustafa, M.D. Phone: 585-739-6415 Email: shahzad.mustafa@rochestergeneral.org

Class Year Name
Allergy and Clinical Immunology Elective

Class Code
PED663

Elective Tags
Patient Care

Block Length
2 wks

Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year

Where should students report?
Rochester General Medical Group Allergy and Immunology Office - 2300 West Ridge Road, 5th Floor
Rochester, NY 14626

What time should students report?
9:00 AM the first Monday of the block

Who should they report to?
S. Shahzad Mustafa, M.D.

Goal

To learn about the clinical presentation of atopic and immunological disorders and to understand how to appropriately diagnose and manage these increasingly common conditions.

Learning Objectives

1. Identify patients (both children and adults) who warrant an allergy and immunology consultation.
2. Perform an appropriate assessment (H & P) and formulate a working differential diagnosis.
3. Understand the indications for ordering diagnostic testing.
4. Understand the utility and limitations of the available diagnostic testing.
5. Develop a preliminary treatment plan for commonly seen conditions in the field (asthma, chronic rhinitis (both allergic and non-allergic), atopic dermatitis, food allergy, chronic sinusitis, acute and chronic urticaria, drug allergy, immune deficiencies, etc).
6. Be able to successfully identify signs and symptoms of the more uncommon disorders in the field (hereditary angioedema, systemic mastocytosis, allergic bronchopulmonary aspergillosis, Churg-Strauss syndrome, hypereosinophilic syndrome, periodic fever syndromes, etc).
7. Understand the indications and potential adverse effects of commonly used therapies.
8. Communicate and work effectively with the outpatient team and with patients, as well as their families.

Schedule of Activities
Students will be working in the outpatient allergy/immunology offices from roughly 8 AM – 5 PM, Mon – Fri. Students will be expected to evaluate both pediatric and adult patients, present the history & physical, and be an active participant in developing an appropriate plan for diagnostic testing and medical management.

**Didactic Activities**

Students will be expected to attend the weekly allergy/immunology division conference on Wednesdays from 7:30 – 8:30 AM as well as the weekly division grand rounds on Thursdays from 8:00 – 9:00 AM.

**Required Reading**

Students will be provided with up-to-date literature and will also have access to Middleton’s Allergy: Principles and Practice, 7th ed.

**Student Evaluations**

Students will discuss their elective experience with the course director and will be given direct, verbal feedback. To satisfactorily pass the elective, students must fulfill the expected activities, attend the required didactic sessions, and demonstrate they have achieved the stated learning objectives.
PED670 Lactation Medicine Elective

Course Information

Course Director
Casey B. Rosen-Carole M.D., M.P.H., M.Ed.
Contact Person
Please contact Dr. Rosen-Carole to schedule this course. (585) 275-1833 casey_rosen-carol@URMC.rochester.edu
Class Year Name
Lactation Medicine Elective
Class Code
PED670
Elective Tags
Outpatient Service, Patient Care
Block Length
2 weeks
Students
1
Prerequisites
(ALL) OBG300 Obstetrics and Gynecology Clerkship, PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Time and who to report to depends on the schedule which is created for each student and will be communicated prior to the rotation
What time should students report?
Who should they report to?

Goal

This is a two week elective aimed at improving a medical student’s experience and knowledge of common and uncommon breastfeeding concerns, public health challenges in breastfeeding, and academic/educational aspects of breastfeeding promotion in an academic setting. By seeing patients in a variety of settings - NICU, Lactation Study Center (via phone), Postpartum Floors, Outpatient Consult Clinics - and with a variety of different professionals – Breastfeeding Medicine Physician, Lactation Consultants, Pharmacists - the student will gain a well-rounded and culturally sensitive approach to caring for breastfeeding patients.

Learning Objectives

1. Patient Care
   - To work with and support patients with breastfeeding challenges in the Outpatient Breastfeeding Medicine Consult Clinics.
   - To take phone calls from providers with questions related to advanced breastfeeding challenges.
   - To round with IBCLCs in the newborn nursery and NICU to improve knowledge and confidence of
breastfeeding care in this high-risk population.

2. Medical Knowledge

- To learn more about specific techniques for supporting breastfeeding mothers.
- To learn about how to evaluate a medication’s safety during pregnancy and breastfeeding.
- To review a journal article related to a breastfeeding topic to present at the end of the rotation.
- To gain confidence with the sentinel articles on benefits of breastfeeding, breastfeeding rates and how to search the breastfeeding literature.

3. Practice Based Learning and Improvement

- To learn more about common breastfeeding challenges to incorporate into learner’s practice.
- To share gained knowledge with other medical students of residents during a teaching session.

4. Systems Based Practice

- To support, encourage and promote breastfeeding for prenatal and postpartum women and families.

5. Professionalism

- To learn compassionate and culturally sensitive ways of interacting and treating patients with breastfeeding challenges.

6. Interpersonal Skills and Professionalism:

- To work within an interdisciplinary team including Lactation Consultants, Pediatricians, OBGYNs, Family Medicine Physicians and Pharmacists.

Schedule of Activities

Work with Dr. Rosen-Carole to create a schedule from this list of activities

(see example schedule below)

- At least 1 session per week inpatient Lactation Consultant (IBCLC) shadowing at Strong Memorial Hospital
- At least 1 session per week inpatient Lactation Consultant (IBCLC) shadowing at another location (Highland Hospital, Rochester General Hospital inpatient, Rochester General Pediatric Associates)
- Other activities for this rotation:
  1. Conduct a psychosocial interview with mother and family about breastfeeding, at a home visit or in clinic. Write-up about this experience in a blog post to Academy of Breastfeeding Medicine blog. Example of blog post: https://bfmed.wordpress.com/2015/06/16/two-lies-and-a-truth-formula-feeding-campaign-is-off-base/
  2. Visit a breastfeeding community support program
    - WIC breastfeeding peer counselor drop-in group http://www2.monroecounty.gov/health-diseases.php#WIC
    - baby cafe
  3. Attend a Centering Pregnancy group on breastfeeding

5. Attend a breastfeeding advocacy meeting
   - Rochester Regional Breastfeeding Coalition http://rochesterregionalbreastfeedingcoalition.com
   - Rochester Hospitals Breastfeeding Collaborative meeting, (contact Holly Widanka: holly_widanka@urmc.rochester.edu)

6. Educate others (Presentation at resident or medical student educational session, blog post on a topic, build lesson plan on a particular topic, case report)

7. Article review/Journal club on breastfeeding article of choice

8. Others by discussion with Dr. Rosen-Carole

Sample 2 Week Schedule

Monday
   - AM: Introduction
     - SMH Lactation Study Center (Pharmacists)
     - Rochester Regional Breastfeeding Coalition Mtng
     - Breastfeeding Medicine Clinic (Lattimore)
     - SMH IBCLC shadowing
   - PM: SMH IBCLC shadowing

Tuesday
   - AM: Breastfeeding Medicine Clinic (Redcreek)
   - PM: HH IBCLC shadowing

Wednesday
   - AM: Breastfeeding Medicine Clinic (AC-6)
   - PM: SMH IBCLC shadowing

Thursday
   - AM: Required Reading

Friday
   - AM: Required Reading

To learn more about UR Medicine Breastfeeding & Lactation Services, visit our website: urmc.rochester.edu/breastfeeding
For more information on pediatric education, please visit our websites:

- Pediatric Residency Program: urmc.rochester.edu/pediatrics/pediatrics-residency
- Department of Pediatrics: urmc.rochester.edu/pediatrics
Course Information

Course Director
Jake J. Deines M.D.
Contact Person
Shelley Weekes (585) 275-8099 Shelley_Weekes@urmc.rochester.edu
Class Year Name
Pediatrics Sub-Internship @SMH
Class Code
PEDEX1
Block Length

Students
5
Prerequisites
PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting
Where should students report?
Assigned inpatient unit at Golisano Children's Hospital
What time should students report?
7:00am
Who should they report to?
Supervising Resident

Goal

The pediatric sub-internship is a clinically based experience, which allows students to assume primary responsibility for patients under the direct supervision of second- or third-year residents and attendings.

Learning Objectives

- Take on primary responsibility for the patient to include formulation of diagnostic and treatment plans, coordination care, and planning for discharge.
- Broaden understanding of pathophysiology and advance clinical problem-solving skills.
- Understand the influence of family, community and society on the pediatric patient during health and disease.
- Understand the importance of and strategies for health promotion and disease prevention.
- Acquire advanced knowledge of physical and psychosocial growth and development.
- Enhance interviewing and physical examination skills.
- Focus oral and written communication appropriately.
- Share information effectively with patient and family.
- Prioritize and organize work effectively.
- Function as a team player with residents, attendings, nurses, and ancillary staff, while effectively
doing hand-offs.

- Perform commonly used procedures.
- Be exposed to the varied aspects of pediatric practice to assist in career selection.

**Schedule of Activities**

Sub-interns are assigned to any one of the primary ward teams at Golisano Children’s Hospital including the Pediatric Intensive Care Unit and Neonatal Intensive Care Unit. Over the four week rotation, students will spend the majority of their time working with their team during the day shifts, with occasional evening long call until 9pm or on weekend days. At least one week of the rotation will be spent as a member of the night float team, covering the service 8pm-7am.

**Didactic Activities**

Sub-interns are fully integrated into departmental rounds and teaching conferences with the house officers.

**Required Reading**

None, except as it pertains to direct patient care.

**Student Evaluations**

Sub-interns are evaluated by their supervising residents, interns, and attendings using the on-line system. Grades are assigned by the sub-internship director based on these evaluations.
Course Information

Course Director
Jake J. Deines M.D.
Contact Person
Kristina Goltermann (585) 275-3367 Kristina_Goltermann@urmc.rochester.edu
Class Year Name
Pediatrics Sub-Internship @RGH
Class Code
PEDEX2
Block Length
4 weeks
Students
1
Prerequisites
PED300 Pediatrics Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
4th Year
Where should students report?
Assigned inpatient unit at Rochester General Hospital
What time should students report?
7:00am
Who should they report to?
Supervising Resident

Goal

The pediatric sub-internship is a clinically based experience, which allows students to assume primary responsibility for patients under the direct supervision of second- or third-year residents and attendings.

Learning Objectives

The learning objectives for the Pediatric Sub-Internship include:

- Take on primary responsibility for the patient to include formulation of diagnostic and treatment plans, coordination care, and planning for discharge.
- Broaden understanding of pathophysiology and advance clinical problem-solving skills.
- Understand the influence of family, community and society on the pediatric patient during health and disease.
- Understand the importance of and strategies for health promotion and disease prevention.
- Acquire advanced knowledge of physical and psychosocial growth and development.
- Enhance interviewing and physical examination skills.
- Focus oral and written communication appropriately.
- Share information effectively with patient and family.
- Prioritize and organize work effectively.
- Function as a team player with residents, attendings, nurses, and ancillary staff, while effectively doing hand-offs.
- Perform commonly used procedures.
- Be exposed to the varied aspects of pediatric practice to assist in career selection.

**Schedule of Activities**

Sub-interns are assigned to the primary ward teams at Rochester General Hospital (B7 Children's Unit). Over the four week rotation, students will spend the majority of their time working with their team during the day shifts, with occasional evening long call 5-9pm or weekend call 6am-6pm. At least one week of the rotation will be spent as a member of the night float team, covering the service 6pm-6am.

**Didactic Activities**

Sub-interns are fully integrated into departmental rounds and teaching conferences with the house officers.

**Required Reading**

None, except as it pertains to direct patient care.

**Student Evaluations**

Sub-interns are evaluated by their supervising residents, interns, and attendings using the on-line system. Grades are assigned by the sub-internship director based on these evaluations.
**Course Information**

Course Director  
Michael A. Scharf M.D.  
Contact Person  
Vicki Perry 273.1812, Vicki_Perry@urmc.rochester.edu,  
Class Year Name  
Child and Adolescent Psychiatry  
Class Code  
PSY606  
Elective Tags  
Consultation Service, Inpatient Service, Outpatient Service, Patient Care, Teaching  
Block Length  
2 weeks or negotiable  
Students  
1  
Prerequisites  
PSY300 Psychiatry Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
Yes  
Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Discuss in advance with Chief Resident  
What time should students report?  
Discuss in advance with Chief Resident  
Who should they report to?  
Discuss in advance with Chief Resident

**Goal**

**All psychiatry electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry**

Students will acquire basic skills for the child and adolescent psychiatric work-up, and understand the role of the child psychiatrist both as a primary caregiver and as a consultant involved in the patient care team.

**Learning Objectives**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

By the end of the rotation the student should be able to:
• Interact with children/adolescents and their families, obtain full psychiatric history, and complete a written psychiatric evaluation.
• Understand basic psychopathology in children and adolescents, including mood disorders and developmental disorders.
• Demonstrate basic understanding of treatments in child and adolescent psychiatry, including psychotherapies (individual, group, family; supportive and behavioral) and pharmacological treatments.
• Understand the systems that provide psychiatric and related care services to children, adolescents, and their families.

**Schedule of Activities**

**All psychiatry electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry**

The student will observe and participate in diagnostic evaluations, treatment team meetings, and group, family, and individual therapies. Specific site/service assignments will be based on student interest and availability; potential options include the Pediatric Psychiatry Consultation and Liaison Team (Golisano Children’s Hospital), Child and Adolescent Outpatient Service, Child and Adolescent Partial Hospital Service, and Child and Adolescent Inpatient Service (or a combination thereof).

**Didactic Activities**

Students will meet individually with his/her preceptor to discuss patients, write-ups, and topics of mutual interest. Students may attend seminars from the Child & Adolescent Psychiatry Fellowship: exact details and schedules dependent on interest and availability.

Students are expected to complete an independent study project and present it to the clinical team they are working with by the end of their rotation. Most students prepare and present a 30 minute Powerpoint presentation, but specific details are individualized based on the nature of the project and will be determined with Rotation Preceptor.

**Required Reading**


Additional articles provided by preceptors and therapists related to cases seen.

**Student Evaluations**
Clinical evaluations by preceptor and other clinicians with whom the student works.
Course Information

Course Director
Mani Abraham Kurien M.B.B.S.
Contact Person
Vicki Perry, vicki_perry@urmc.rochester.edu, 273.1812,
Class Year Name
Inpatient Psychiatry
Class Code
PSY610
Elective Tags
Inpatient Service, Patient Care, Teaching
Block Length
2 weeks
Students
1
Prerequisites
PSY300 Psychiatry Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Discuss in advance with Dr. Kurien
What time should students report?
Discuss in advance with Dr. Kurien
Who should they report to?
Discuss in advance with Dr. Kurien

Goal

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

To gain experience and skills in evaluating and caring for patients admitted to acute psychiatric services

Learning Objectives

** All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry **

The student will be able to:
Gather a complete clinical database for psychiatric inpatient unit, including patient interview and mental status examination, discuss with collateral informants as indicated, and record review.
- Present the clinical databases in oral and written formats
- Generate and discuss a differential diagnosis and formulation
- Help implement needed treatments as a part of multidisciplinary inpatient care team.

**Schedule of Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

The emphasis is on active participation in all aspects of patient care. Students will work a minimum of 8:00 a.m. - 5:00 p.m. 5 days/week. The student will be assigned to a specific inpatient unit, based on planning with the course director, available options including general psychiatry, MICA (Mental Illness-Chemical Abuse), geriatrics and neuropsychiatry, and child and adolescent.

**Didactic Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Students will be expected to read about and discuss the learning objectives with their inpatient attending. They will attend Psychiatry Grand Rounds (Wednesdays, 8:00 - 9:00 a.m.)

**Required Reading**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Case-based reading assignments will be taken from Synopsis of Psychiatry 8th edition (Kaplan and Sadock), as well as from case-based review of primary literature.

**Student Evaluations**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Students will be evaluated by their inpatient attending psychiatrist. To receive a grade of pass, the student must demonstrate achievements of the learning objectives to the course director, based on receiving a satisfactory clinical evaluation.
PSY612 Consultation Psychiatry

**Course Information**

Course Director
Jennifer Hope Richman M.D.
Contact Person
Vicki Perry, 273.1812 vicki_perry@urmc.rochester.edu Barb Olesko, 275.4336 Connie Smith, 275.3592
Class Year Name
Consultation Psychiatry
Class Code
PSY612
Elective Tags
Consultation Service, Inpatient Service, Patient Care, Teaching
Block Length
By arrangement. Minimum of two full weeks.
Students
1
Prerequisites
PSY300 Psychiatry Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
By arrangement with Dr. Richman
What time should students report?
By arrangement with Dr. Richman
Who should they report to?
By arrangement with Dr. Richman

**Goal**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

To gain skills in diagnosing and treating various psychiatric disorders that occur in the general hospital; to develop skills functioning as a psychiatric consultant in this setting.

**Learning Objectives**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

By the end of the rotation the student should be able to become more comfortable with:

- the evaluation and management of depression in the medically ill
- the interactions between medical illness and psychiatric symptoms
- neuropsychiatric disorders such as delirium and dementia, somatoform disorders, suicidal behavior,
anxiety or agitation with medically ill patients

- the use and management of psychopharmacologic agents in the elderly or medically ill
- the assessment of capacity in such patients.

**Schedule of Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Evaluation of new patients and follow-up of existing patients in outpatient clinics and in the hospital with attending and team rounds daily. There is a thorough review of all new consults and live interview of the patients by the attending or nurse practitioner as appropriated by our Triage nurse. Daily case discussion rounds and distribution of new consults occurs twice daily at 9:00 am and 1:00 pm, or in the interval as needed.

**Didactic Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Departmental Grand Rounds weekly, Wednesdays, 8:00 - 9:00 am.
Daily case-based and bedside teaching.

**Required Reading**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Handouts given at orientation, access to DSM V (print or online).

**Recommended Reading**

* Concise Guide to Consultation Psychiatry (Rundell and Wise)
* Psychiatry Mentor (Privitera and Lyness)

**Student Evaluations**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Mid-rotation feedback by student's preceptor. End of rotation review. Daily assessment of the student's ability to collect data, present it coherently, discuss clinical reasoning and decision-making with each case. A written
evaluation with grade will be rendered by the preceptor at the end of the elective. There is also 360 input from Nurse Practitioners.
### Course Information

**Course Director**
Aurelian N. Niculescu M.D.

**Contact Person**
Vicki Perry, 273.1812 vicki_perry@urmc.rochester.edu

**Class Year Name**
Emergency Psychiatry

**Class Code**
PSY615

**Elective Tags**
Consultation Service, Inpatient Service, Patient Care, Teaching

**Block Length**
2 wk blocks by arrangement

**Students**
1

**Prerequisites**
PSY300 Psychiatry Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Arrange in advance with Dr. Niculescu

What time should students report?
By arrangement with Dr. Niculescu

Who should they report to?
By arrangement with Dr. Niculescu

### Goal

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

To gain experience and skills in rapid and accurate assessment of patients presenting to a psychiatric emergency room

### Learning Objectives

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

By the end of the rotation the student should be able to:

- Gather a complete clinical database for a psychiatric emergency room visit, including patient
interviews and mental status examination, discussion with collateral informants as indicated and record review.

- Present the clinical database in highly focused oral and written formats.
- Generate and discuss a differential diagnosis and formulation.
- Discuss the recommendations and treatment options provided to the patient.

**Schedule of Activities**

*All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry*

The emphasis is on active participation in all aspects of the patient evaluations. Students will work a minimum of 5 shifts/week, a combination of day and evening shifts to be scheduled on an individual basis.

**Didactic Activities**

*All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry*

Students are expected to read about and discuss the learning objectives with the psychiatric emergency room faculty, residents, and staff during their clinical day. They will attend Psychiatry Grand Rounds, Wednesdays, 8:00 - 9:00 a.m. This is an active research site, and there are numerous opportunities for medical students to engage in research activities if desired.

**Required Reading**

*All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry*

Case-based reading assignments will be taken from Synopsis of Psychiatry 9th edition (Kaplan and Sadock), as well as from case-based review of primary literature.

**Student Evaluations**

*All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry*
Students will be evaluated by faculty for each shift worked, as well as by the course director. To receive a grade of pass, the student must demonstrate achievement of the learning objectives to the course director, based partly on receiving satisfactory clinical evaluations from their attending and residents.
PSY616 Geriatric Psychiatry

**Course Information**

Course Director
Elizabeth J. Santos M.D.

Contact Person
Vicki Perry, 273.1812 vicki_perry@urmc.rochester.edu

Class Year Name
Geriatric Psychiatry

Class Code
PSY616

Elective Tags
Consultation Service, Inpatient Service, Patient Care, Teaching

Block Length
2-4 weeks

Students
1

Prerequisites
PSY300 Psychiatry Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Arrange in advance with Dr. Santos

What time should students report?
Arrange in advance with Dr. Santos

Who should they report to?
Arrange in advance with Dr. Santos

**Goal**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

The purpose of this elective is to give the student knowledge and clinical skills related to the assessment and treatment of mental disorders in older adults.

**Learning Objectives**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

1. The student will understand the broad range of psychopathology manifested in older adults, and the range of treatment options available to such patients, including how such conditions and their treatments may differ from those in younger adults.

2. The student will gain experience and skills in working with selected geriatric patient populations, including
mood disorders, cognitive disorders, and disorders secondary to general medical conditions, as seen in inpatient, outpatient, and consultative settings.

**Schedule of Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Depending on each student's specific interests, an individualized schedule will be created that will include supervised clinical experiences together with a program of seminars and guided independent readings. Block length: 2 weeks.

**Didactic Activities**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

As per above; didactics will be chosen from our program's broad range of clinical and research seminars and case conferences.

**Required Reading**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Individualized reading list from primary literature, together with relevant chapters from geriatric psychiatry texts such as the American Psychiatric Publishing Textbook of Geriatric Psychiatry (Blazer, Steffens, Busse, eds).

**Student Evaluations**

**All psychiatry electives must be approved prior to scheduling. Please contact elective coordinator, Vicki Perry**

Evaluation form completed by supervisor(s) at the end of the rotation; feedback given on an ongoing basis during the rotation.
**Course Information**

Course Director
Robert Lawrence Weisman D.O.

Contact Person
Vicki Perry 273.1812 vicki_perry@urmc.rochester.edu

Class Year Name
Forensic Psychiatry

Class Code
PSY617

Elective Tags
Consultation Service, Inpatient Service, Patient Care, Teaching

Block Length
2-4 wks

Students
1

Prerequisites
PSY300 Psychiatry Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split? No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
by arrangement with Dr. Weisman

What time should students report?
by arrangement with Dr. Weisman

Who should they report to?
by arrangement with Dr. Weisman

**Goal**

**All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry**

The purpose of this elective is to give the student knowledge and clinical skills related to the care and treatment of patients in forensic psychiatric settings.

**Learning Objectives**

**All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry**

The student will be able to:

- Gain experience and basic skills in working with psychiatric patients who have involvement with the legal system
- Gather a complete clinical database for forensic psychiatric inpatient/outpatient unit, including patient...
interview and mental status examination, discuss with collateral informants as indicated and record review

- Present the clinical databases in oral and written formats
- Generate and discuss a differential diagnosis and formulation

Schedule of Activities

** All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry **

The student will work closely with the Forensic Psychiatry Fellows and rotate to the Forensic Psychiatry rotation sites at Rochester Psychiatric Center's Regional Forensic Unit; Monroe County Sociolegal Center and Wayne Behavioral Health.

Didactic Activities

** All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry **

The student will participate in psychiatry and law seminars, landmark case seminars and clinical case conferences that occur during the student's rotation.

Required Reading

** All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry **

Individualized reading list from primary literature, relevant chapters from Forensic Psychiatry texts and Landmark Cases supplied in the American Academy of Psychiatry and the Law's Landmark Cases, Volumes I - III, as appropriate to the seminars.

Student Evaluations

** All psychiatry electives must be approved in advance by the elective coordinator, Vicki Perry **

Evaluation form completed by supervisor(s) at the end of the rotation; feedback given on an ongoing basis during the rotation.
**Course Information**

Course Director  
Robert Lawrence Weisman D.O.

Contact Person  
Vicki Perry, Coordinator: 273.1812 vicki_perry@urmc.rochester.edu

Class Year Name  
Outpatient Psychiatry

Class Code  
PSY622

Elective Tags  
Consultation Service, Outpatient Service, Patient Care, Teaching

Block Length  
2 weeks

Students  
1

Prerequisites  
PSY300 Psychiatry Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
By arrangement with Joann Leslie

What time should students report?  
By arrangement with Joann Leslie

Who should they report to?  
By arrangement with Joann Leslie

**Goal**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

To gain understanding and experience in diagnosing and treating various psychiatric disorders in an outpatient setting utilizing different modalities of treatment and community resources.

**Learning Objectives**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

The student will be able to:

- learn assessment and management of psychiatric disorders of all age groups in different ambulatory
understand the differences in the ambulatory system versus other service systems within a behavioral health care setting

- understand the role of psychiatrist and different models of care in ambulatory settings

**Schedule of Activities**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

Half day supervised clinics at Older Adults Clinic, Child Outpatient Clinic, Adult Ambulatory Clinic (Strong Ties, General Adult Ambulatory), and nursing home consultation

**Didactic Activities**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

Varies per clinic site

**Required Reading**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

DSM-5: Synopsis of Psychiatry; additional recommended readings available at service sites

**Student Evaluations**

* * All Psychiatry Electives must be approved prior to being scheduled. Please contact elective coordinator, Vicki Perry **

Mid-rotation feedback. A written evaluation will be completed by the preceptor at the end of the elective. End of rotation review.
**Course Information**

Course Director
George S. Nasra M.D., M.B.A.

Contact Person
Vicki Perry, 273.1812, Vicki_perry@urmc.rochester.edu
Stephanie K Schmidt, 275.3575, Stephanie_Schmidt@URMC.Rochester.edu

Class Year Name
Collaborative & Integrated Care Psychiatry

Class Code
PSY624

Elective Tags
Consultation Service, Outpatient Service, Patient Care

Block Length
2 weeks or negotiable

Students
1

Prerequisites
PSY300 Psychiatry Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Arrange with Dr. Nasra

What time should students report?
Arrange with Dr. Nasra

Who should they report to?
Arrange with Dr. Nasra

**Goal**

*All psychiatry electives must be pre-approved in advance by the elective director (George Nasra, MD)*

To gain a better understanding of the value of integrated care in psychiatry and develop skills in integrating behavioral health in primary and specialty care.

**Learning Objectives**

By the end of the rotation the student should:

1. Gain a better understanding of different team-based care models of integrating behavioral health in outpatient and inpatient settings, including the Collaborative Care Model, ECHO telementoring model, telehealth practice in psychiatry, proactive inpatient consultation and behavioral health integration in specialty care.

2. Develop skills in providing caseload focused consultations to behavioral health care managers according to the Collaborative Care Model of behavioral health integration.

3. Develop skills in the assessment and psychiatric management of employees within a continuum of
wellness programs through the University of Rochester.

4. Become more comfortable in the assessment and psychiatric management of outpatients with oncological concerns.

5. Develop a better understanding of the proactive consultation model for inpatients

**Schedule of Activities**

1. Participate in proactive consultation model (PRIME) with attending psychiatrist, psychiatric social worker and psychiatric NP. Mondays 8:00am to 12:00pm

2. Evaluation and follow up of patients at Behavioral Health Partners (BHP) with attending psychiatrist. Mondays 1pm to 5pm

3. Participate in outpatient consultations with PGY-3 psychiatry residents at Highland Family Medicine, review cases with attending psychiatrist and residents as a group, and participate in caseload focused consultation with behavioral health care manager and attending psychiatrist according to the Collaborative Care Model. Tuesdays 8am to 11:30am.

4. Participate in clinical huddles and evaluation of patients at Complex Care Center with attending psychiatrist. Wednesdays 9am to 4:30pm

5. Participate in caseload focused consultation through telehealth with attending psychiatrist. Thursdays 10am to 12 pm.

6. Participate in assessment and follow up of inpatient consultations at Highland Hospital (community hospital setting) with attending psychiatrist. Tuesdays 3pm – 5pm.

7. Evaluation and follow up of patients at the Wilmot Cancer center with attending psychiatrist. Fridays 8:30 to 11:30am.

8. Flexible project including literature review, presentation or other educational assignment on the topic of integrated psychiatric care, population health or employee wellness. Thursday and Friday afternoons are flexible times for this purpose.

**Didactic Activities**

1. Departmental Grand Rounds weekly, Wednesdays 8:00 – 9:00 am.

2. Weekly one-hour meetings with course director to review progress and answer questions about assigned readings.

**Required Reading**

1. DSM-5 (print or online)


**Recommended Reading**

**Student Evaluations**

Mid-rotation feedback by student’s preceptors, end of rotation review and written evaluation with grade will be rendered by each preceptor as well as the course director as indicated at the end of the elective.
Course Information

Course Director
Jennifer J. Findeis-Hosey M.D.
Contact Person
Maria Cecilia Reyes 275-3054 Mariacecilia_reyes@urmc.rochester.edu Magdalene Sikes 275-4135 magdalene_sikes@urmc.rochester.edu

Class Year Name
Introduction to Pathology/Laboratory Medicine
Class Code
PTH601
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care

Block Length
2 weeks
Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
G5323
What time should students report?
7:30am
Who should they report to?
Maria Cecilia Reyes, MD

Goal

The goal of this rotation is to give students an expanded view of medicine through a greater understanding of Pathology. Students will work closely with the faculty, staff, fellows and residents of the Department of Pathology/Laboratory Medicine at Strong Memorial Hospital, Highland Hospital, and the Central Laboratory. Time will be spent in both Anatomic Pathology (AP) and Clinical Pathology/Laboratory Medicine (CP/LM), including rotations in some, but not all, of the following areas: Autopsy Pathology, Clinical Chemistry, Cytopathology, Hematopathology, Microbiology, HLA, Cytogenetics, Microarray, Surgical Pathology, and Transfusion Medicine. Students will spend on average 0.5-3.5 days within an area of the department, which will allow to student to encounter the many facets of Pathology. To further enhance their learning during the rotation, students will attend didactic conferences with Pathology residents and submit a short written summation of an interesting case for Case of the Month or publication.

Learning Objectives

By the end of the rotation the student should be able to:

- Demonstrate a general understanding of the scope of pathology as a field of medicine.
- Understand the consultative role that a pathologist may play in the care of a patient, and how clinicians may utilize pathologists in this role.
- Review pathology-related topics initially encountered in the first and second year medical school...
curriculum and expand on these topics through encounters in the areas of AP and CP/LM.

**Schedule of Activities**

Daily schedules will vary by the area of Pathology that the student is rotating in, however the hours of the rotation are typically 8 am to 5 pm, weekdays only. Students will work with residents, fellows, faculty and staff during the rotation. Medical students will be encouraged to attend didactic conferences with the pathology residents.

**Didactic Activities**

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both AP and CP/LM and involve interactive didactics at the multi-headed microscope, question-based didactics, unknown slide sessions, and gross organ/specimen review in the autopsy suite.

Students additionally receive case-related teaching from residents, fellows, staff and faculty members during the daily operations of the specific areas of Pathology.

Students will complete a short writing assignment by the end of the rotation, choosing between a summary of a case encountered during the rotation or a formal case report for publication.

**Required Reading**

There is no required reading, however students are given access to our extensive collection of pathology textbooks/reading materials.

**Student Evaluations**

Rotating students will be evaluated by the members of the department that they work with. ACGME milestones will be used as a benchmark, including ability to synthesize presented materials, fund of knowledge, effort, professionalism, and written case/diagnostic summary.
Course Information

Course Director
Jennifer J. Findeis-Hosey M.D.
Contact Person
Maryanne Eisenberg 585-276-4939 Maryanne_Eisenberg@URMC.Rochester.edu
Class Year Name
Surgical Pathology
Class Code
PTH602
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care
Block Length
2-4 weeks
Students
1
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Surgical Pathology (G-5204)
What time should students report?
9:00A
Who should they report to?
Jennifer Findeis-Hosey, MD

Goal

The goal of this rotation is to build upon the PTH601 (Introduction to Pathology/Laboratory Medicine) experience and give students an advanced experience in Surgical Pathology. In this advanced rotation, students will spend in the gross room examining surgical specimens, at the frozen section bench, and actively participating in the workup of surgical pathology specimens within our subspecialty practice at Strong Memorial Hospital. As in PTH601, students will attend didactic conferences with Pathology residents. This course is available by request. Please email contact person with dates requested.

Learning Objectives

By the end of the rotation the student should be able to:
Make basic pathological diagnoses.
Understand the process by which a pathologist acts as a consultant to the clinician and the interactive process involved.

Schedule of Activities

The hours of the rotation are typically 8 am to 5 pm, weekdays only. Students will typically be paired with a resident or fellow on a subspecialty service for a week at a time. During that week they will be an active
member of that subspecialty service, participating in the formulation of pathologic diagnoses, as well as
gaining exposure the frozen sections and the macroscopic examination of oncologic and non-oncologic
surgical specimens.

Didactic Activities

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both anatomic and clinical pathology/laboratory medicine and involve interactive didactics at the multi-headed microscope, question-based didactics, unknown slide sessions, and gross organ specimen review in the autopsy suite.

Students additionally receive one-on-one case-related teaching from residents, fellows, and faculty members as they work to formulate pathologic diagnoses in our daily clinical practice.

Required Reading

Students are given access to our extensive collection of pathology textbooks, which are available for review as they formulate diagnoses for the cases that they are exposed to.

Student Evaluations

Rotating students will be evaluated by members of the department that they work with. They will be evaluated in regards to their ability to synthesize material presented to them, fund of knowledge, effort, and participation.
**Course Information**

Course Director  
Scott Alan Kirkley M.D.  
Contact Person  
Maryanne Eisenberg 585-276-4939 Maryanne_Eisenberg@URMC.Rochester.edu  
Class Year Name  
Clinical Pathology  
Class Code  
PTH603  
Elective Tags  
Consultation Service, Inpatient Service, Patient Care  
Block Length  
2-4 weeks  
Students  
1  
Prerequisites  
PTH601 Introduction to Pathology/Laboratory Medicine  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
Surgical Pathology (G-5204)  
What time should students report?  
10:30A  
Who should they report to?  
Jennifer Findeis-Hosey, MD

**Goal**

The goal of this rotation is to expand on the PTH601 (Introduction to Pathology/Laboratory Medicine) prerequisite elective, and give students additional exposure in Clinical Pathology/Laboratory Medicine. Students will work with the Course Director/Co-Director to create a schedule which may encompass time on the Transfusion Medicine, Coagulation, Clinical Chemistry, Microbiology and/or Hematopathology services.

**Learning Objectives**

Will be determined by student and course director depending on rotation composition/areas of focus.

**Schedule of Activities**

The hours of the rotation are approximately 8 am to 5 pm, weekdays only. The schedule of activities will vary depending on the areas that the student rotates through, but may include the following: Attendance at Blood Bank morning laboratory rounds; Working with Pathology residents to triage clinical issues involving the Blood Bank and Chemistry laboratories; Reviewing of Hematopathology cases, including formulation of diagnoses. Students may attend didactic conferences with pathology residents.
Didactic Activities

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both anatomic and clinical pathology. Students additionally receive one-on-one case-related teaching from residents, fellows, and faculty members.

Required Reading

Although there is no required reading, reference books are available on all rotations for the medical student to access.

Student Evaluations

Rotating students will be evaluated by faculty that they work with. They will be evaluated in reference to attendance on the rotation, their understanding of the various policies and procedures within Pathology, diagnostic skills (when applicable), and their final written case summation.
Course Information

Contact Person
Maryanne Eisenberg 585-276-4939 Maryanne_Eisenberg@URMC.Rochester.edu
Class Year Name
Anatomic Pathology
Class Code
PTH605
Elective Tags
Consultation Service, Patient Care
Block Length
2-4 weeks Contact Dept. for Approval.
Students
1
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split” by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Surgical Pathology (G-5204)
What time should students report?
9:00A
Who should they report to?
Jennifer Findeis-Hosey, MD

Goal

The goal of this rotation is build upon the PTH601 (Introduction to Pathology/Laboratory Medicine) elective and provide students with an advanced rotation in Anatomic Pathology. Students will work closely with Pathology faculty, staff, and residents at Strong Memorial Hospital. Students will work with the Course Director to create a schedule which may include time on Surgical Pathology, Cytopathology, Autopsy Pathology, and Neuropathology. To further enhance their learning during the rotation, students will attend didactic conferences with Pathology residents.

Learning Objectives

By the end of the rotation the student should be able to:
Make basic pathological diagnoses.
Understand the process by which a pathologist acts as a consultant to the clinician and the interactive process involved.

Schedule of Activities

The hours of the rotation are approximately 7:30 am to 5 p.m., weekdays only. The schedule of activities will vary depending on the areas that the student rotates through, but may include the following:

Surgical Pathology: Students will typically be paired with a resident or fellow on a subspecialty service for a week at a time. During that week they will be an active member of that subspecialty service, participating in
the formulation of pathologic diagnoses, as well as gaining exposure the frozen sections and the macroscopic examination of oncologic and non-oncologic surgical specimens. Exposure to an autopsy is available upon request.

Autopsy or Neuropathology: The student will be exposed to post mortem examinations and presentations of organs to the clinical attending, and participate in sign-out sessions with the attending pathologist.

Cytopathology: Students will attend daily sign-out sessions with the attending cytopathologist, as well as accompany the cytopathology faculty and staff on procedures (i.e., fine needle aspirates, EBUS, etc.)

Didactic conferences with the pathology residents are available most days at 7:30/8 a.m. and at noon.

**Didactic Activities**

Numerous pathology teaching conferences are available for rotating medical students in conjunction with our residency program. These teaching conferences encompass both anatomic and clinical pathology and involve interactive didactics at the multi-headed microscope, unknowns sessions, and gross organ specimen review in the autopsy suite.

Students additionally receive one-on-one case-related teaching from residents, fellows, and faculty members as they work to formulate pathologic diagnoses in our daily clinical practice.

**Required Reading**

Although there is no required reading, reference books are available on all rotations for the medical student to access.

**Student Evaluations**

Rotating students will be evaluated by the members of the department that they work with. They will be evaluated in reference to attendance on the rotation, fund of knowledge, synthesis of materials, understanding of the various policies and procedures involved in Anatomic Pathology, and their grossing and diagnostic skills (when applicable).
**Course Information**

Course Director
Jennifer J. Findeis-Hosey M.D.
Contact Person
Maryanne Eisenberg 585-276-4939 Maryanne_Eisenberg@URMC.Rochester.edu
Class Year Name
Hematopathology
Class Code
PTH606
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service, Patient Care
Block Length
2-4 weeks
Students
1
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Hempath Office 3-3600
What time should students report?
8:30A
Who should they report to?
Susan Martin

**Goal**

This course is an advanced elective to further expand on the pre-requisite PTH601 course. Working with our hematopathology faculty, fellow and residents, the medical student will have over-the-scope time, assess benign disorders, lymphomas, leukemias and myeloproliferative disease. This course is available by request. Please email contact person with dates requested.

**Learning Objectives**

By the end of the rotation students should be able to explain the role of the hematopathologist in the care of patients and be able to understand how hematopathology diagnoses are rendered (process and content).

**Schedule of Activities**

Participate in mandatory conferences, sign-out with faculty/fellow in multi-headed scope room, attend interdisciplinary conferences.
**Didactic Activities**

Students will learn through case review (individual and during sign-outs), resident didactic conferences, and multidisciplinary conferences.

**Required Reading**

Not required. Our training program uses Doctor Hsi’s *Hematopathology* textbook. This is available for the student to reference in the Hematopathology Unit.

**Student Evaluations**

The student will be evaluated using the ACGME competency guidelines.
Course Information

Course Director
Jennifer J. Findeis-Hosey M.D.
Contact Person
Maryanne Eisenberg 585-276-4939 Maryanne_Eisenberg@URMC.Rochester.edu
Class Year Name
Forensic Pathology
Class Code
PTH607
Elective Tags
Consultation Service, Patient Care
Block Length
2 - 4 weeks Must contact for approval of dates.
Students
1
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Surgical Pathology (G-5204)
What time should students report?
8:30AM
Who should they report to?
Jennifer Findeis-Hosey, MD

Goal

Gain a deeper understanding of Forensic Pathology while rotating at the Monroe County Office of the Medical Examiner. This course is offered by request and is an advanced elective following completion of the PTH601 elective. Email the listed contact person to determine if desired dates are available.

Learning Objectives

Gain a deeper understanding of Forensic Pathology while rotating at the Monroe County Medical Examiners' Office.

Schedule of Activities

Observe autopsies at the Monroe County Medical Examiners' Office (MEO). Students may have opportunities to visit scenes or attend court to observe case-related trials. Given the legal nature of the work performed at the MEO, this is an observation-only rotation.

Didactic Activities

No formal didactic activities.
Required Reading

No required reading.

Student Evaluations

ACGME guidelines will be used as a benchmark.
Course Information

Course Director
Mahlon D. Johnson M.D., Ph.D.
Contact Person
Christina Piazza 585-275-0856 Christina_Piazza@URMC.Rochester.edu
Class Year Name
Neuropathology
Class Code
PTH608
Elective Tags
Consultation Service, Patient Care
Block Length
2 - 4 weeks
Students
1
Prerequisites
PTH601 Introduction to Pathology/Laboratory Medicine
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Room 1-6429
What time should students report?
8:30AM
Who should they report to?
Christina Piazza

Goal

During this elective, the student will acquire a basic understanding of the reactions of the central nervous system and will formulate a diagnosis for the most common and classical neuropathologic lesions encountered at autopsy and at the surgical bench, with particular attention to the diagnosis of CNS neoplasms, cerebrovascular diseases, and neurodegenerative diseases. The student will gain insight into how the neuropathologist completes his/her diagnostic workup. This course is available by request. Please email contact person with requested dates.

Learning Objectives

Brain cutting conference
1. Identify gross neuroanatomical landmarks and areas to be sampled for microscopic evaluation
2. Describe the gross abnormalities using pathologic terminology
3. Explain the basic concept of tissue processing (i.e. what happens from the bench to the slide)
4. Analyze the autopsy brain slides
5. Recognize and articulate microscopic abnormalities
6. Formulate a clinical pathologic diagnosis on each case
**Neurosurgical specimens**
1. Describe the process of intraoperative evaluation of tissue samples.
2. Formulate a differential diagnosis based on the clinical history and CT/ MR imaging findings, and correlate this with the gross and histologic specimens during intraoperative evaluation.
3. Participate in the evaluation of the cytologic and histologic intraoperative preparations with the attending.
4. Formulate a diagnosis prior to the reviewing the slides with the attending.
5. Manage the cases from the medical and cost effective points of view.
6. Apply specialized techniques such as cytogenetic, molecular, immunohistochemistry and electron microscopy to help formulate/ solidify a diagnosis.
7. Interpret the ancillary studies and correlate the findings with the diagnosis.

**General Responsibilities**
1. Review neuropathologic autopsy and surgical slides and formulate diagnoses independently prior to meeting with the attending and then review with the attending.
2. Review the OR schedule, look up history on potential neurosurgical cases that may require intraoperative evaluation, review the history/ imaging with the attending on call.
3. Attend calls for intraoperative evaluation of neurosurgical cases during weekdays from 8 am-5 pm.
4. Review the autopsy histories; attend and participate in Brain Cutting Conference.
5. Observe grossing of neurosurgical specimens (with resident/ PA).
6. Review Blackboard (online) training course for neuropathology.
7. Complete Neuropathology exam online exam (optional).

**Schedule of Activities**
Students will review cases, participate in sign-out sessions with faculty, and attend neuropathology-related conferences. Students may participate in Pathology resident didactic sessions.

**Didactic Activities**

**Didactic Activities**
1. Microscopic “sign out” with attending including intraoperative assessments (see above).
2. Teaching slide sets (review on own, describe slides using pathologic terminology, formulate differential/final diagnosis, then review and discuss with attending).

**Conferences**
1. Brain cutting (required) / every Tuesday at 9:30 am, 1-6468 (autopsy suite).
2. Pediatric Brain Tumor Conference / first Tuesday of month at noon, Van Wagenen Room 2-8130.
3. Brain cutting of Medical Examiner’s cases / 1st Wed every month at M.E.’s office (subject to change).
5. Multidisciplinary Neuro- oncology conference (required) / every Thursday at 8:15-9:00 am, Imaging Sciences Conference Room, G-3302.
6. Neuromuscular conference (slide review) / 2nd and 4th Thursday every month 12pm noon (NP s/o room).
7. Neurology Grand Rounds / every Friday at 9:00 am K-307 (3-6408); followed by case presentations at 10:00 am.
8. Neurosurgery/Neuropath didactic conference / Friday 10:00 am (TBA), L. Slaughter room.

**Required Reading**
Although there is no required reading, suggested references are below:
Most are available in the neuropathology library (Powers room #1-6442)

11. Sternberg SS: Histology for Pathologists, 1997, Chapters 11, 12

Student Evaluations

The student will be evaluated by faculty using the ACGME competencies as a benchmark, but is not limited to, attendance on the rotation, understanding of the various policies and procedures involved in neuropathology, diagnostic skills at the end of their rotation.
Course Information

Course Director
Stan Lee Weiss M.D.
Contact Person
Dawn Mulcock Medical Student Curriculum Coordinator; (585)-273-5476;
dawn_mulcock@urmc.rochester.edu
Class Year Name
General Radiology
Class Code
RAD602
Elective Tags
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research-Clinical
Block Length
2 Weeks
Students
4
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Students will be instructed where to report prior to the start of the rotation.
What time should students report?
Varies, but typically 9 am or earlier on the first day.
Who should they report to?
Dawn Mulcock; Imaging Sciences, Room 3-4447.

Goal

The goal of the General Radiology elective is to allow medical students to develop an appreciation of the complexity of diagnostic imaging including an understanding of the types of studies which are available and the information they can provide.

The General Radiology elective is structured to provide an overview of the breadth of diagnostic imaging, invasive radiology, and an introduction to the fundamentals of diagnostic radiology. This includes the basics of chest, skeletal, gastrointestinal, and genitourinary system imaging, and introduces angiography, nuclear medicine, magnetic resonance imaging, computed tomography, ultrasound, and neuroradiology.

It is not the purpose of the elective to have students become skilled interpreters of imaging studies. A familiarity will be established, but directed to the use of the technologies involved.

Learning Objectives

The learning objectives of this elective are to assist medical students in:
• Developing an understanding of the differences between, and interactions among, each of the imaging specialties and the operation of these radiologic subspecialties in the context of modern radiologic and medical practice.
• Learning basic plain film and CT interpretation and becoming familiar with sonography and MR, and recognizing limitations in knowledge and understanding of radiological interpretation.
• Gaining an understanding of the diagnostic limitations of imaging studies and how these parameters affect
  patient care, clinical indications for obtaining studies, the relative risk/benefit of certain radiologic procedures,
  and the basic technical aspects of how examinations are performed.

**Schedule of Activities**

- During the elective, the student's major assignment will be to observe image interpretation and various
  procedures in the assigned Radiology imaging suite(s).

- Attendance at the daily Radiology resident conferences and selected tumor board conferences is not
  required but is strongly encouraged.

- Daily evaluations from the faculty, fellows, and/or residents that the medical student works with are
  required. It is the student's responsibility to secure the evaluations and submit them to the elective
  coordinator upon completion of the elective.

- Students will be responsible for writing and presenting one interesting patient case that has been observed
  and submitting the write-up to the elective coordinator upon completion of the elective. The case write up
  should include:
  • Indications for exam radiologic findings.
  • Patient history interpretation of findings.
  • Type of exam performed.
  • Differential diagnosis
  • Diagnostic options follow-up
  • Key images (include copies of films)
  • Appropriate literature references

**Didactic Activities**

• Daily resident conference (12:00 - 1:30PM)
• Selected multidisciplinary/tumor board conferences

**Required Reading**

Recommended:
• Essential Radiology by Richard B. Gunderman
• Radiology Made Ridiculously Simple by Patrice Tetreault, MD
• Squire's Fundamentals of Radiology Sixth Edition by Robert Novelline

**Student Evaluations**

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as
on their communication, medical knowledge, interpersonal, and professional skill set as well as the
presentation of an interesting patient case discovered during the elective. Upon completion of the elective,
it is the students' responsibility to submit their rotation evaluations and interesting case write-up to the
elective coordinator.
Course Information

Course Director
Vaseem U. Chengazi M.D., Ph.D.
Contact Person
Veronica Crittenden, x5-4741, veronica_crittenden@urmc.rochester.edu
Class Year Name
Nuclear Medicine
Class Code
RAD603
Elective Tags
Patient Care
Block Length
Negotiable
Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
Yes
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
G-3207
What time should students report?
8:00 a.m.
Who should they report to?
Receptionist

Goal

: To understand the basics for the clinical application of diagnostic and therapeutic nuclear medicine procedures to the patient population.

Learning Objectives

By the end of the rotation the student should be able to:
?Understand the clinical basics for functional imaging in diagnostic nuclear medicine procedures such as bone scans, infectious disease localization, papillary studies, cardiac procedures, ventilation perfusion scan and tumor and endocrine imaging.
?Establish an understanding of the basic requirements for radiation safety for workers and patients.
?Be able to describe the differences in approach and calculation of dose for various radioisotopic therapeutic procedures.
?Develop at least a basic approach to the evaluation of the correlated and competitive modalities in their application to various disease states.

Schedule of Activities

During the morning, the students will participate in a basic activity with the residents and attending faculty in the diagnostic/therapeutic clinic activity. In the afternoons, students will be expected to participate in the daily reading/instructional session from 2:30-5:00 p.m. in which the day?s caseload is used as a springboard for
discussion of diagnostic and therapeutic problems and applications. Students will also be expected to participate in the routine conference schedule of both the Division of Nuclear Medicine and the Department of Radiology.

**Didactic Activities**

Regular conference schedule of Nuclear Medicine and Imaging Sciences.

**Required Reading**

A Clinician's Guide to Nuclear Medicine. Edited by Andrew Taylor, M.D., and David M. Schuster and Naomi Alazraki

**Student Evaluations**

Student evaluations will be collated by the course director utilizing reports from both attending and resident faculty as to student participation and development.
**RAD610 Subspecialty Radiology**

**Course Information**

Course Director
Stan Lee Weiss M.D.

Contact Person
Dawn Mulcock Medical Student Curriculum Coordinator; (585)-273-5476; dawn_mulcock@urmc.rochester.edu

Class Year Name
Subspecialty Radiology

Class Code
RAD610

Elective Tags
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care, Primary Care, Research - Clinical

Block Length
2 Weeks Must get approval before scheduling

Students
1

Prerequisites
RAD602 General Radiology

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Students will be directed where to report prior to the start of the rotation.

What time should students report?
Varies, but typically 9:00 am or earlier on the first day.

Who should they report to?
Dawn Mulcock; Imaging Sciences, Room 3-4447

**Goal**

This elective is intended for students who are either preparing for a career in radiology or have a particular interest in a subspecialty area of radiology. Completion of the General Radiology elective (RAD602) is a prerequisite.

Must contact GME office at Rochester Regional prior to scheduling. Contact information is provided below.

graduatemedicaleducation@rochesterregional.org

**Learning Objectives**

At the completion of the elective, students should be able to increase understanding of diagnostic radiology subspecialties by supplementing exposure to radiology from didactic material taught in the first two years of medical school as well as from the General Radiology elective. This includes:

• Identifying indications for exams based on clinical, lab, and prior radiographic information.
• Describing how the exam is performed and necessary patient preparations.
• Identifying what alternative diagnostic procedures exist.
• Understanding the general principles of interpretation.
• Following up on clinical outcome.
Schedule of Activities

-During the elective, the student's major assignment will be to observe image interpretation and various procedures in the assigned Radiology imaging suite(s).

-Attendance at the daily Radiology resident conferences and selected tumor board conferences is not required but is strongly encouraged.

-Daily evaluations from the faculty, fellows, and/or residents that the medical student works with are required. It is the student's responsibility to secure the evaluations and submit them to the elective coordinator upon completion of the elective.

-Students will be responsible for writing and presenting one interesting patient case that has been observed and submitting the write-up to the elective coordinator upon completion of the elective. The case write up should include:
  • Indications for exam radiologic findings.
  • Patient history interpretation of findings.
  • Type of exam performed.
  • Differential diagnosis
  • Diagnostic options follow-up
  • Key images (include copies of films)
  • Appropriate literature references

Didactic Activities

• Daily resident conference (12:00 - 1:30 PM)
• Selected multidisciplinary/tumor board conferences

Required Reading

Recommended:
• Essential Radiology by Richard B. Gunderman
• Radiology Made Ridiculously Simple by Patrice Tetreault, MD
• Squire's Fundamentals of Radiology Sixth Edition by Robert Novelline

Student Evaluations

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as on their communication, medical knowledge, interpersonal, and professional skill set as well as the presentation of an interesting patient case discovered during the elective. Upon completion of the elective, it is the students' responsibility to submit their rotation evaluations and interesting case write-up to the elective coordinator.
RAD668 Interventional Radiology Elective

**Course Information**

Contact Person  
Dawn Mulcock Medical Student Curriculum Coordinator; (585)-273-5476;  
dawn_mulcock@urmc.rochester.edu  
Class Year Name  
Interventional Radiology Elective  
Class Code  
RAD668  
Elective Tags  
Consultation Service, Inpatient Service, Multidisciplinary, Outpatient Service, Patient Care, Primary Care  
Block Length  
2 Weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
Students will be instructed where to report prior to the start of the elective.  
What time should students report?  
Varies, but typically 6:45 am or earlier on the first day.  
Who should they report to?  
Dawn Mulcock; Imaging Sciences, Room 3-4447

**Goal**

This elective is designed for students strongly interested in or committed to Interventional Radiology as a career. This is an immersive elective in the Interventional section where hands-on experience can be gained performing a diverse range of vascular and nonvascular image-guided, minimally invasive procedures. Students will work with residents, fellows, and attending radiologists performing interventions in almost all organ systems.

**Learning Objectives**

The learning objectives of this elective are to assist the medical student in:  
• Introduction to radiologic vascular anatomy.  
• Recognizing the benefits of interventional radiology procedures.  
• Familiarization and discussion of indications of procedures.

**Schedule of Activities**

• During the elective, the student's major assignment will be to observe/participate in various procedures in the Interventional Radiology imaging suites.  
• There will be morning rounds with the residents, fellows, attending radiologists, and other interventional staff to discuss/review the scheduled patient cases.
• Attendance at the daily radiology resident conferences and selected multidisciplinary/tumor board conferences is not required but is strongly encouraged.

• Daily evaluations from the residents, fellows, and/or faculty that medical students work with are required, and it is the students’ responsibility to secure the evaluations and submit them to the elective coordinator upon completion of the elective.

Didactic Activities

• Daily resident conference (12:00 - 1:30 PM)
• Selected multidisciplinary/tumor board conferences

Required Reading

Recommended:
• Case Review: Vascular and Interventional Imaging by Suresh Vedantham and Jennifer Gould
• Handbook of Interventional Radiologic Procedures Fourth Edition by Krishna Kandarpa and Lindsay Machan
• Squire's Fundamentals of Radiology Sixth Edition by Robert Novelline

Student Evaluations

Residents, fellows, and/or faculty evaluate students daily on the basis of attendance and interest as well as on their communication, medical knowledge, interpersonal, and professional skill set. Upon completion of the elective, students are responsible to obtain their evaluations and submit them to the elective coordinator.
Course Information

Course Director
Jennifer H. Paul M.D.
Contact Person
Jenna Cerasuolo 585-275-3274
Class Year Name
Physical Medicine and Rehabilitation
Class Code
RHB600
Elective Tags
Consultation Service, Inpatient Service, Outpatient Service
Block Length
2 - 4 weeks
Students
2
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Students should report to the inpatient rehabilitation unit on 5-1200 the first day of their elective for 8:30 am meeting
What time should students report?
8:30 a.m.
Who should they report to?
5-1200 Inpatient Unit: Dr. Nickels

Goal

To develop an appreciation of the impact of disease and injury on function, and to understand the application of physical medicine approaches and rehabilitation strategies to the alleviation of functional impairments.

Learning Objectives

By the end of the rotation the student should be able to:
Demonstrate proficiency in examination of the musculoskeletal system.
Integrate neurologic and musculoskeletal findings into the development of functional assessments.
Predict the nature of functional impairment resulting from specific neurologic or anatomic injuries.
Understand the roles of each of the members of the rehabilitation team.
Order appropriate tests as required to develop a musculoskeletal or neurologic diagnosis, as well as a rehabilitation diagnosis.
Order appropriate therapeutic interventions based on functional diagnoses.
Order appropriate interventions in the face of acute illness or injury to prevent unnecessary complications that frequently lead to disability.
Describe the breadth of the field of PM&R, and discuss the roles of various settings, including acute inpatient, subacute/SNF and outpatient rehabilitation.

Schedule of Activities
This elective is designed with flexibility in mind. Inpatient, outpatient, or a combination of experiences are possible. The elective will focus on providing students with an education and an exposure to the broad field of Physical Medicine and Rehabilitation.

Students who desire to rotate on an inpatient service will become a part of the rehabilitation team, serving with a resident and an attending physician. Students will round with the team, as well as evaluate and manage their own patients. They will observe their patients as they undergo rehabilitation, gaining an understanding of the variety of therapeutic approaches used. Students assigned to SMH will see patients recovering from spinal cord injury, stroke, amputation, orthopaedic surgery, burns, multiple trauma and a variety of neurologic conditions. Students assigned to St. Mary's will work with adult and pediatric patients recovering from traumatic brain injury, intracerebral hemorrhage, stroke, brain neoplasm, in addition to the rehabilitation diagnoses described for SMH.

Students who desire to rotate through the outpatient clinics will work with patients with a variety of needs including but not limited to: musculoskeletal injuries, electrodiagnostic consultation, pain management, post concussive syndrome, spinal cord injury, stroke, amputee care, arthritis, and the evaluation and management of rehabilitation needs in the outpatient setting. Clinic sites include SMH, St. Mary's Hospital, Comprehensive Rehabilitation Center, Rochester Rehabilitation Center, and the VA Outpatient clinic.

**Didactic Activities**

Students will attend Rehabilitation Grand Rounds, journal club, and didactic sessions which occur on Thursday mornings.

**Required Reading**

Materials given on first day of rotation.

**Student Evaluations**

To receive a grade of satisfactory, students must see all assigned patients, write or dictate admission, discharge and progress reports in a timely fashion and demonstrate proficiency in the examination of their patients, with particular emphasis on the musculoskeletal and neurologic exams, in the evaluation of functional deficits and in the formulation of appropriate treatment plans. A faculty preceptor will observe each student, and the preceptor and student at the end of the rotation will complete a written evaluation.
**Course Information**

Contact Person  
Marge Roberts, 273-1841, marjorie_roberts@urmc.rochester.edu

Class Year Name  
Surgical Intensive Care Unit

Class Code  
SUR606

Elective Tags  
Inpatient Service

Block Length  
4 weeks

Students  
4

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
8-2527

What time should students report?  
An e-mail will be sent prior to beginning of elective with reporting instructions

Who should they report to?  
Advance Practice Provider

**Goal**

To understand the pathophysiology of critically ill patients.

**Learning Objectives**

By the end of the rotation the student should be able to:

- Recognize critically ill patients and learn to prioritize problems.

- Explain fluid shifts and fluid management in critically ill patients.

- Solve acid/base problems.

- Understand when to use the different modalities of mechanical ventilation.

- Identify arrhythmias.

- Explain and use all the hemodynamic parameters which can be obtained from a pulmonary artery
catheter.

- Identify the causes and manage hypoxia.
- Identify the causes and manage hypercarbia
- Identify the causes and manage oliguria.
- Appreciate the pharmacokinetics and pharmacodynamics of drugs used in the ICU.
- Identify and treat the various forms of shock.
- Write appropriate total parenteral nutrition/total enteral nutrition orders.

**Schedule of Activities**

Students participate in the daily rounds in the Intensive Care Unit. They follow and present patients to the ICU Attending and participate in all didactic sessions. Sub-Internship students will be expected to take call approximately every third or fourth night. Nights that you take call you will work directly with the ICU residents and APPs. You will leave after morning rounds, or no later than 9:00 a.m. Elective students are not required to take call. Both elective and Sub-I students will be required to shadow one of the SICU nurses for one night during your rotation. You will come in at 7p and stay until 7a, and then be off the next day.

**Didactic Activities**

Students participate in the daily ICU lectures given in the Critical Care Learning Center (room 8-2527) from 3-4 pm.

**Student Evaluations**

To receive a grade of Pass, the student must participate in ICU activities and present their assigned patients on rounds. If taken as a subinternship, additional requirements will be discussed with Dr. Prasad directly.
Course Information

Course Director
Michael Clinton Stoner M.D.

Contact Person
Julie K. Burkhart, 31712/Liz Schinaki, 56772 julie_burkhart@urmc.rochester.edu
elizabeth_schinski@urmc.rochester.edu

Class Year Name
Vascular Surgery

Class Code
SUR630

Elective Tags
Inpatient Service, Patient Care, Teaching

Block Length
2 or 4 weeks

Students
1

Prerequisites
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?
Please contact Julie K. Burkhart before scheduling a visiting medical student at 273-1712!! Julie K. Burkhart will notify the medical student where and what time to report.

What time should students report?
They will be notified un advance where to report!!

Who should they report to?
Vascular surgery chief resident

Goal

Vascular Surgery is the study and treatment of circulatory disorders outside the heart. Students will be exposed to the workup, medical, surgical and catheter-based management of vascular disease in both inpatient and outpatient venues. Teaching experiences include rounds, assisting in the operating room and catheterization laboratory, evaluating patients in the clinic. The Division holds weekly didactic teaching conferences and a daily clinical conference.

Learning Objectives

This is a clinical, "hands-on" rotation, where students will be expected to be a member of the normal operative team. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. If time and interest permits, outpatient office experience is available (particularly for students spending more time on the rotation), although the focus of this elective is inpatient care of sick patients.

By the end of this rotation, the student should be able to:
- Describe basic relevant clinical vascular anatomy
- Begin to understand basic concepts and decision-making in patients with vascular problems
- Gain experience in the acute management of pre- and postoperative surgical patients with a generally high
level of acuity
- Be able to describe the basic vascular surgical procedures: Open and endovascular aortic surgery, carotid surgery, lower extremity bypass and amputation, and other operations

This rotation can be performed in two ways. Third-year students or those without extensive experience can do a two-week rotation. Fourth-year students or those interested in general or vascular surgery as a career are encouraged to spend four weeks with us on a formal subinternship. Although the student will work with and have the full support of the interns and housestaff, he/she will be encouraged to take primary responsibility for his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

**Schedule of Activities**

As above, students will work as a member of the surgical team. Rounds generally begin at 6am, and the entire team meets informally at 6:45 to go over patient status and plans for the day, followed by conference at 7am. Surgery starts at 7:30 or 8am, with rounds taking place at 8am every day for those not in the operating rooms. Days end when the work is done, generally between 6 and 8pm. Evening call will not be required, but can easily be arranged if interest permits. You may rotate at Strong Memorial Hospital, Highland Hospital, and possibly in the Finger Lakes.

**Didactic Activities**

Mondays: 7am: Indications Conference

Wednesdays: 7am: Interventional Cardiology Conference (first of the month only), M+M otherwise

Thursdays: 7-10am: Grand Rounds, M+M, CPC, and Basic Science

5pm: "Big Boy Rounds," 7-1400 (interns, students present cases)

Fridays: 7am: Basic Science and Journal Club alternating

**Required Reading**

"Vascular Surgery" chapter in Schwartz, "Principles of Surgery." Additional sources can be assigned as individual interest permits

**Student Evaluations**

The student will be evaluated based on interest, attendance, and participation, and on whether he/she has accomplished the objectives discussed above.
SUR640 Comprehensive Burn Care

**Course Information**

Course Director  
Derek Edward Bell M.D.  
Contact Person  
Beth Jocolano/273-3656/beth_jocolano@urmc.rochester.edu  
Class Year Name  
Comprehensive Burn Care  
Class Code  
SUR640  
Elective Tags  
Patient Care  
Block Length  
2-4 weeks  
Students  
2  
Prerequisites  
SUR300 Surgery Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
Burn Center (3-2800) at 7:30 am the first Monday of the rotation. Ask to have the burn resident paged.  
What time should students report?  
0730  
Who should they report to?  
Dr. Derek Bell

**Goal**

This rotation will expose students to the pathophysiology, assessment, treatment and rehabilitation of the burn victim.

**Learning Objectives**

The purpose of this elective is to acquaint future physicians with a scientific and rational approach to wound care in these complex patients. Also, it is the intention of this course to dispel the frequently associated myths and fears associated with burn care. Students will also gain experience with surgical critical care including ventilator management, resuscitation and nutritional support as well as out-patient management of thermal injury.

**Schedule of Activities**

Students on this elective will be expected to be a part of the Burn Care Team. They will participate in intensive care delivery, wound management techniques, surgical procedures. They will also attend rounds, multi-disciplinary conferences and burn specific lectures.

**Didactic Activities**
Lectures are given on Tuesdays and during the week as time permits.

Required Reading

Will come from Total Burn Care (ed. Herndon) and the Burn Section from the American College of Surgeons Care of the Surgical Patient
**Course Information**

Course Director  
Carolyn E. Jones M.D.  
Contact Person  
Julie K. Burkhart/273-1712 julie_burkhart@urmc.rochester.edu

Class Year Name  
Thoracic Surgery  
Class Code  
SUR650  
Elective Tags  
Inpatient Service, Patient Care, Teaching  
Block Length  
2 weeks  
Students  
1  
Prerequisites  
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
All visiting medical students need to get approved by Julie K. Burkhart at 273-1712.

What time should students report?  
They will be notified by Julie K. Burkhart!!

Who should they report to?  
Dr. Carolyn Jones

**Goal**

1. To understand common thoracic surgical disease processes and their management.  
2. To provide exposure to a general thoracic surgical practice for students potentially interested in pursuing this specialty.

**Learning Objectives**

By the end of the rotation the student should be able to:  
1. List the common types of thoracic malignancies, understand the relevant work-up and potential treatment strategies, and participate in outpatient follow-up.  
2. Recognize various benign esophageal and pulmonary diseases that may require surgical intervention, the appropriate diagnostic and therapeutic considerations, and proper patient selection.  
3. Understand the variety of operative techniques, including open and minimally invasive approaches, and the conduct of safe surgery.

**Schedule of Activities**

Monday 7:00 ? 8:00 a.m. ? Didactic teaching conference (resident lectures, morbidity/mortality conference case presentation, review questions.)

Clinics: Monday, p.m., Tuesday/Wednesday/Thursday a.m.
OR: Every Tuesday/Wednesday/Friday (all day); other cases as permitted
Endoscopy/Manometry Lab: As scheduled
A.M. Rounds Daily

**Didactic Activities**

Mondays ? 7:00 ? 8:00 a.m. (as per above)
One Wednesday evening per month (6:30 ? 9:00 p.m.): Grand Rounds
Thursday 7:00 a.m. (except summer months): Surgery Grand Rounds
Saturday 8:00 a.m. (every other week): Thoracic Oncology Conference

**Required Reading**

No required text/syllabus. Students are expected to come to the operating room having familiarized themselves with the patient’s history & disease process, having read about the disease and planned operative procedure, and understand appropriate consideration in their postoperative management. Recommended text can be suggested by the faculty.

**Student Evaluations**

Students will be evaluated by all faculty members on the Thoracic Surgical team. Characteristics assessed will be: 1) Fund of knowledge as demonstrated by case specific reading and general medical base; 2) Enthusiasm/motivation/work ethic; 3) Integrity/reliability; 4) Interpersonal skills and relationships with faculty, house staff and nurses.
**Course Information**

Contact Person  
Melanie Zandvoort, 276-5655  

Class Year Name  
Neurosurgery Elective  

Class Code  
SUR651  

Elective Tags  
Inpatient Service  

Block Length  
2 or 4 weeks  

Students  
2  

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting  

Where should students report?  
Melanie Zandvoort will email the student one to three weeks in advance regarding rotation specifics.  

What time should students report?  
7:00 am  

Who should they report to?  
Neurosurgery Chief Resident.  

**Goal**

Introduction to evaluation of neurosurgical diseases, neurosurgical interventions and evaluation to treat neurosurgical patients. For further information please log on to: [http://www.urmc.rochester.edu/neurosurgery/](http://www.urmc.rochester.edu/neurosurgery/)

**Learning Objectives**

By the end of the rotation the student should be able to: Evaluate neurosurgical patients. Evaluate and choose neurosurgical procedures appropriate to treat a variety of conditions.

**Schedule of Activities**

Accompany attending MD in OR, evaluation of new patients in resident clinic, and reviewing of diagnostic studies.

**Didactic Activities**

Will shadow with attending, MD in his practice. Students are expected to attend weekly academic conferences, Thursdays, 7:30 - 8:15 a.m. and Fridays, 6:30- 11:00 a.m.

**Required Reading**
No required reading. Will recommend readings.

Student Evaluations

The student will be evaluated on their participation in the above referenced activities.
Course Information

Course Director  
Bryan B. Barrus M.D.

Contact Person  
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu

Class Year Name  
Cardiac Surgery

Class Code  
SUR656

Elective Tags  
Inpatient Service, Patient Care, Teaching

Block Length  
2 weeks

Students  
1

Prerequisites  
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No

Available to the following medical students:  
3rd Year, 4th Year, International Visiting, Visiting

Where should students report?  
Please contact Julie K. Burkhart before scheduling any visiting medical students at 273-1712. Julie K. Burkhart will notify the medical student where and what time to report.

What time should students report?  
See above!

Who should they report to?  
Chief resident - Julie K. Burkhart to notify medical student.

Goal

To provide a comprehensive exposure to cardiac surgery, with special emphasis on anatomy, physiology and surgical care of patients with all aspects of adult cardiac disease.

Learning Objectives

By the end of the rotation the student should be able to:  
? Understand coronary anatomy and indications for coronary artery surgery.

? Understand basic cardiac and pulmonary physiology and how it is applied to patients after cardiac surgery

? Understand indications for valvular and thoracic aneurysm surgery

? Understand arrhythmia's and their treatment

? Understand the patient care protocols for post-operative patients

? Be exposed to patient's evaluation and follow-up in out-patient setting.

Schedule of Activities

? Exposure to one service in cardiac surgery

? A.M. Resident rounds/ Week-end optional

? P.M. Attending Rounds mandatory
? Tuesday A.M. Cardiac Service
? Wednesday A.M. Cardiac Cath Rounds

**Didactic Activities**

? Friday A.M. Cardiac Didactic Conference
? Daily O.R. exposure
? Wednesday A.M. Outpatient office exposure

**Required Reading**


**Student Evaluations**

Evaluation of students will be based on their team participation, interest in learning, and fund of knowledge regarding cardiac anatomy, physiology and treatment.
Course Information

Course Director
Glenn Todd Schneider M.D., M.S.
Contact Person
Sheila K. McCart, 585-276-5181, sheila_mccart@urmc.rochester.edu
Class Year Name
Otolaryngology Elective
Class Code
SUR661
Elective Tags
Inpatient Service, Outpatient Service, Patient Care, Teaching
Block Length
2 or 4 wks
Students
3
An elective experience is sometimes "split" by these weeks. Is it okay to split? Yes
Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Students should email the chief residents listed below on Thursday or Friday of the week before elective begins.
What time should students report?
Time will be determined by the chief residents. Rounds usually begin between 6-6:15am at Strong.
Who should they report to?
paul_lambert@urmc.rochester.edu; jamesp_manning@urmc.rochester.edu;
Daniel_martin@urmc.rochester.edu

Goal

To provide an overview of a wide range of disease and problems of the ear, nose, and throat, and related structures of the head and neck. To provide clinical experience in primary care otolaryngology.

Learning Objectives

By the end of the rotation the student should be able to:

Identify common otolaryngologic disorders and have basic knowledge of therapy for common situations, including neoplastic, inflammatory, congenital, traumatic and allergic immune diseases.

Be competent to complete a comprehensive examination of the head and neck.

Be skilled in the use of the following instruments: otoscope, laryngoscope, nasal speculum, and head light.

Be competent to treat acute infection of the ear, nose, and throat.
Be able to determine when a patient needs further evaluation or treatment.

Be able to identify otolaryngologic emergencies and triage them appropriately.

Have a basic working knowledge of head and neck surgical anatomy.

**Schedule of Activities**

All students will be expected to view the following videos in our video library: Examination of the Head and Neck and the Ear. Cummmings, Smith and Davidson; Head and Neck Surgery, Common Procedures. Coulthard and Davidson.

**Didactic Activities**

Typically, the student will report to the chief residents at the start of daily rounds on the Monday beginning their clerkship. The team usually begins rounds between 6:00-6:15am in the WCC5 resident room. The student will accompany the preceptor through his day of practice, surgery, rounds, and conferences. Students will be required to attend all formal teaching rounds, journal club, and divisional conferences, which are held during their ENT clerkship.

Please contact chief residents with any questions or concerns before or during clerkship.

**Required Reading**

All students will be expected to obtain and read about specific patients/cases in a standard textbook in otolaryngology. (Several copies are available on loan in our library).

"Otolaryngology for Primary Care Physicians" will be provided to you by the chief resident.

**Student Evaluations**

A satisfactory performance will be based on evaluations by faculty preceptor, based on learning objectives, and each student's clinical performance, with particular emphasis on interest, initiative, conscientiousness and inter-personal skills with faculty member and patients.
**Course Information**

Course Director
Derek Edward Bell M.D.

Contact Person
Beth Jocolano; 273-3656; beth_jocolano@urmc.rochester.edu

Class Year Name
Clinical Experience in Basic Plastic Surgery

Class Code
SUR671

Elective Tags
Inpatient Service, Outpatient Service, Patient Care

Block Length
2 - 4 weeks

Students
4

Prerequisites
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?

No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
First Monday of the rotation to the Bales Library at 6:30 AM room 2-5109

What time should students report?
6:30 AM to the Bales Library 2-5109 for Monday Morning Conference

Who should they report to?
Derek Bell, MD

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**Goal**

To understand the nature and scope of plastic surgery and be able to function at the R-1 level while on Plastic Surgery.

**Learning Objectives**

By the end of the rotation the student should be able to:

1. Identify which patients would benefit from care by a plastic surgeon.
2. Evaluate the patient presenting for plastic surgical evaluation.
3. Render clinical and surgical care (evaluate disorders, discuss treatment options, write history and physicals, write post-operative orders, write hospital progress notes, formulate treatment plans).
5. Demonstrate clear understanding of a topic of interest to be presented at grand rounds.

**Schedule of Activities**

Students are assigned to the Strong Memorial Hospital. Day begins with morning rounds, usually around 6:30 a.m. Clinical or surgical activities (outpatient clinic, operating room, ambulatory surgical center, inpatient floor consults, emergency room) are followed by evening rounds, usually finishing by 5 or 6 p.m. 4 week rotations will be apprenticeship style, spending a week with each attending learning general plastic surgery,
breast and microsurgery, aesthetic surgery, burn surgery, pediatric and craniofacial surgery, and body contouring after massive weight loss.

**Didactic Activities**

Attendance is mandatory at Monday morning didactic core conference from 6:30 to 7:30 a.m. in the Bales Library. Thursday morning grand rounds is a city wide conference in the Bales Library from 7-8 a.m., and includes morbidity and mortality conference as well as indications conferences. Journal club is typically held on the last Friday of every month in the evening at an attending’s home or local restaurant. Attendance at other didactic opportunities such as hand conference or craniofacial team conference is strongly recommended.

**Required Reading**

Plastic and Reconstructive Surgery – Essentials for Students. This is available for free at: http://www.plasticsurgery.org/Medical_Professionals/Publications /Plastic_and_Reconstructive_Surgery_Essentials_for_Students.html

**Student Evaluations**

The student’s performance will be evaluated by all faculty, house officers, and staff who are assigned to the Division of Plastic Surgery. A concise, 20 minute grand rounds presentation on a subject of interest to the student will be evaluated. One on one questioning by faculty members in particular will be used to evaluate the accomplishment of the learning objectives.
SUR675 Transplant Surgery Elective

Course Information

Course Director
Koji Tomiyama M.D., Ph.D.
Contact Person
Julie K. Burkhart, 273-1712 julie_burkhart@urmc.rochester.edu
Class Year Name
Transplant Surgery Elective
Class Code
SUR675
Elective Tags
Inpatient Service, Patient Care, Teaching
Block Length
2 or 4 weeks
Students
1
Prerequisites
SUR300 Surgery Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year, International Visiting, Visiting
Where should students report?
Julie K. Burkhart will notify the medical student where and what time to report.
What time should students report?
See above!
Who should they report to?
See above!

Goal

Transplant Surgery is a unique specialty that requires not only complex surgical skills, management and decision making but also a significant component of medical knowledge. It requires deep understanding of multifaceted medical and surgical conditions as well as systematic approach to deal with a very sick patient population. Students will be exposed to comprehensive patient workup, medical, surgical management of transplant and hepatobiliary conditions in both inpatient and outpatient setting. Due to the nature of our service that requires expertise from multiple different specialties, we established truly multidisciplinary treatment team with assistance from group of transplant hepatology, transplant nephrology, transplant pharmacy, surgical critical care and transplant infectious disease. Students will be also exposed to expert management on non-surgical issues on critically ill populations. Teaching experiences include rounds, assisting in the operating room, evaluating patients in the clinic. The Division holds a daily clinical conference and weekly didactic education rounds.

Learning Objectives

Students will be expected to be a member of the surgical team in the operating room and on the floor. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. Students are encouraged to observe patient evaluation at clinic at least once during their rotation, although the focus of this rotation is inpatient care of postoperative and critically ill patients.
By the end of this rotation, the student should be able to:
- Describe basic relevant clinical abdominal anatomy
- Begin to understand complex medical, surgical and infectious problems in transplant patients.
- Gain experience in the acute management of pre- and postoperative surgical patients with high level of complexity
- Be able to describe the basic open abdominal surgical procedures including organ procurement, vascular access, kidney / liver transplant and liver surgery.

Also student is required to make a brief presentation on interested topic in the field of transplant and/or hepatobiliary surgery.

This rotation can be performed in two ways. Third-year students or those without extensive experience can do a two-week rotation. Fourth-year students or those interested in general surgery as a career are encouraged to spend 3-4 weeks with us on a formal sub-internship. Although the student will work with and have the full support of the interns and residents, he/she will be encouraged to take primary responsibility for his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

**Schedule of Activities**

Students will work as a member of the surgical team. Pre rounds generally begin at 6am, and multidisciplinary ‘Table round’ starts at 8am. Surgery starts at 7:30am, with rounds taking place from 8am for those not in the operating rooms. Days end when the work is done, generally between 6 and 8pm. Evening call will not be required, but can easily be arranged if interest permits.

**Didactic Activities**

Mondays: 2pm: Kidney transplant selection committee

Tuesdays: 3pm: Education round/Journal Club

Thursdays: 7-10am: Grand Rounds, M+M, CPC, and Basic Science

Fridays: 10-12:30: Transplant Quality Case Review/M&M, Liver transplant selection committee

**Required Reading**

"Transplantation" chapter in Schwartz, "Principles of Surgery"

ASTS (American Society of Transplant Surgeons) online modules, access code is included in orientation material

Other supportive reading materials including operative technique slides will be distributed at the beginning of rotation.

**Student Evaluations**

The student will be evaluated based on interest, attendance, participation, end of rotation presentation and
on whether he/she has accomplished the objectives discussed above. Feedback will be given at an end of rotation session with the surgical attendings and residents.
**Course Information**

Course Director
Clinton Strauss Morrison M.D.
Contact Person
Beth Jocolano 273-3656 Beth_Jocolano@Urmc.rochester.edu
Team Care of the Pediatric Craniofacial Patient
Class Code
SUR676
Elective Tags
Patient Care
Block Length
2-4 weeks
Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting
Where should students report?
Contact either Beth Jocolano or Dr. Clinton Morrison
What time should students report?

Who should they report to?

**Goal**

Students should be able to experience and understand the multi-disciplinary treatments of children with facial differences.

**Learning Objectives**

Medicine is becoming disease focused rather than specialty focused. Caring for children with complex facial anomalies requires a multidisciplinary approach. The student should:

1. understand the breadth of issues associated with cleft lip and palate and other facial differences

2. be able to identify who would benefit from referral to a craniofacial team
3. experience the interplan and information transfer that is essential to team care.

**Schedule of Activities**

Daily time with all members of the craniofacial team. Includes conferences, clinics and operating time. Time will be spent in the areas of genetics, ENT surgery, Oral surgery, dentistry, and plastic surgery.

**Didactic Activities**

Daily time with all members of the craniofacial team. Includes conferences, clinics and operating time. Time will be spent in the areas of genetics, ENT surgery, Oral surgery, dentistry, and plastic surgery.

**Required Reading**

Provided

**Student Evaluations**

Students will be evaluated by multiple faculty members in the areas of genetics, oral surgery, ENT, and plastic surgery. The end of month presentation will be graded by our team.
SUR677 Pediatric Surgery

Course Information

Contact Person
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu

Class Year Name
Pediatric Surgery

Class Code
SUR677

Elective Tags
Inpatient Service, Patient Care, Teaching

Block Length
2 or 4 weeks

Students
1

Prerequisites
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
Please contact Julie K. Burkhart before scheduling a visiting medical student. Julie K. Burkhart will notify the medical student where and what time to report.

What time should students report?
See above!!

Who should they report to?
See above!!

Goal

Pediatric Surgery is the study and treatment of surgical disease in infants, children, and adolescents. Students will be exposed to the pre-operative workup, management (both medical and surgical), and post-operative care of pediatric surgical disease in both inpatient and outpatient venues. Teaching experiences include rounds, assisting in the operating room, evaluating patients in the clinic, and weekly didactic teaching conferences. By the end of the rotation, students should be able to describe the presentation, pre-operative workup, operative therapy, post-operative care, and follow-up for some routine pediatric surgical problems (umbilical hernia, inguinal hernia, pyloric stenosis, appendicitis, and one congenital neonatal condition based on their experience).

Learning Objectives

This is a clinical, "hands-on" rotation, where students will be expected to be a member of the pediatric surgical team. Although rounds and patient care will be an integral part of the rotation, the student is expected and encouraged to spend as much of his or her time as possible in the operating room. The student should also attend at least one clinic per week.

By the end of this rotation, the student should make significant strides in achieving proficiency in the following areas:
● Patient Care
  ○ Perform a thorough and efficient history and physical examination.
  ○ Organize laboratory, radiologic and pathologic data in a coherent fashion.
  ○ Determine which (if any) laboratory tests are necessary.
  ○ Understand when to order appropriate tests with attention to cost effectiveness, radiation sensitivity.
  ○ Be comfortable with the preoperative preparation of the patient and with routine postoperative care.
  ○ Write medically appropriate notes.
  ○ Understand medically appropriate, weight-based orders.
  ○ Evaluate the pediatric abdomen and determine if peritoneal signs are present.
  ○ Demonstrate safe handling of instruments.
  ○ Perform skin closure under supervision.

● Medical Knowledge
  ○ Exhibit a general knowledge of pediatric hernias and hydroceles, umbilical hernias, pyloric stenosis, and appendicitis in children.
  ○ Discuss surgical risks in emergency and elective cases in children and neonates.
  ○ Be knowledgeable in the areas of pathophysiology of vital organ systems.
  ○ Identify straightforward problems correctly.
  ○ Identify causes and workup of bilious emesis in the neonate.
  ○ Recognize the difference between gastroschisis and omphalocele.

● Practice-Based Learning and Improvement
  ○ Demonstrate competence in the basic laboratory evaluation for pediatric ward patients.
  ○ Discuss the indications for CT Scans, barium swallows, ultrasounds, and barium enemas in the pediatric surgical population.
  ○ Participate in daily rounds, outpatient clinics, and teaching conferences.
  ○ Demonstrate the ability to search Medline and find evidence based articles to confirm decisions.
  ○ Demonstrate the ability to evaluate surgical literature.

● Interpersonal Relationships and Communication
  ○ Keep patients informed of treatment plans and operative plans after discussion with attending staff.
  ○ Communicate effectively with residents and attending staff.
  ○ Respond appropriately to the nursing staff.
  ○ Communicate effectively with the pediatric house staff and faculty.

● Professionalism
  ○ Show self-initiative and integrity (this cannot be overstated; initiative and drive are often what distinguishes outstanding students.
  ○ Show honesty in doctor-patient relationships and other medical interactions.
  ○ Exhibit cordial and respectful behavior toward patients, families, fellow residents and the ancillary staff.
  ○ Teach other medical students.

● Systems-Based Practice
  ○ Display appropriate use of resources from daily staff rounds and weekly and monthly M&M conferences.
  ○ Develop an approach to cost benefit analysis, medical economics and outcomes analysis.

This rotation can be performed in two ways.

1. Third-year students or those without extensive experience can do a two-week rotation.
2. Fourth-year students or those interested in general or pediatric surgery as a career are encouraged to spend four weeks with us on a formal sub-internship. Although the student will work with and have the full support of the interns and housestaff, he/she will be encouraged to take primary responsibility for
his/her own patients, acting as their intern (with appropriate supervision and backup). Our goal is to have the student learn to perform at an intern's level, the only difference being that he/she will have responsibility for fewer patients.

**Schedule of Activities**

As above, students will work as a member of the surgical team. Rounds generally begin at 6am, but ultimately are determined by the chief resident depending on the inpatient census. Surgery starts at 7:15 or 7:30 am. We usually have cases Monday – Friday. Clinics are on Tuesday and Wednesday mornings at 830 am and Thursday afternoon at 1230 pm. Days generally end after evening rounds – usually by 6-7 pm. Overnight call is not required. However, it is not uncommon that urgent cases are added on in the evening (appendectomies). Students are encouraged to scrub these cases if their schedule allows.

**Didactic Activities**

Mondays: 2pm Radiology Conference alternating with Resident Teaching Conference

(weekly)

Wednesdays: 2pm Pediatric Surgery Morbidity and Mortality Conference (monthly)

3pm Resident/student teaching session with Dr Wakeman (weekly)

Thursdays: 7-10am: Grand Rounds, M+M, CPC, and Basic Science (weekly)

**Required Reading**

- Pediatric Surgery Handbook – accessible through MedHub
- Additional sources can be assigned as individual interest permits.

**Student Evaluations**

The student will be evaluated based on attendance, participation, and contributions to the pediatric surgery team.
**Course Information**

Contact Person  
Julie K. Burkhart 273-1712 Julie_Burkhart@urmc.rochester.edu  
Class Year Name  
Hepato-biliary/Surgical Oncology  
Class Code  
SUR678  
Elective Tags  
Inpatient Service, Patient Care, Teaching  
Block Length  
2 or 4 weeks  
Students  
1  
Prerequisites  
SUR300 Surgery Clerkship  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
3rd Year, 4th Year, Visiting  
Where should students report?  
Julie K. Burkhart will notify the medical student where and what time to report.  
What time should students report?  
See above!  
Who should they report to?  
See Above!

**Goal**

To understand the field of hepatobiliary surgery as it relates to the multidisciplinary care of patients with complex hepatobiliary and gastrointestinal disorders. This course is appropriate for students interested in surgery but also related specialties like gastroenterology, oncology, radiology, and pathology.

**Learning Objectives**

**Learning objectives:** Can be tailored to student’s needs. In general, by the end of elective the student should be able to:

1. Perform complete, accurate histories and physical examination on patients with hepatobiliary, pancreatic, gastrointestinal and general oncologic problems  
2. Interpret laboratory, diagnostic tests and radiological imaging studies associated with common HPB-GI diseases accurately  
3. Formulate from the history, physical exam, and patient studies, a differential diagnosis and develop an initial plan for further patient evaluation and management  
4. Describe indications for operative surgery  
5. Discuss the risks and benefits of common HPB procedures  
6. Identify the necessary diagnostic modalities to develop a preliminary plan of management
7. Outline a plan of action for the management of surgical infection, with either surgery or a plan for antibiotics
8. Demonstrate proficiency in the preoperative preparation of patients for surgery and routine postoperative care with guidance of faculty
9. Demonstrate medical communication skills by performing satisfactory (accurate and concise) oral presentations
10. Demonstrate interpersonal skills necessary to maintain professionalism, communicate appropriately with patients, their families, and other medical and paramedical personnel involved in patient care
11. Actively participate as a member of the health care team

Schedule of Activities

HPB-GI is a busy surgical service at Strong Memorial Hospital. The team meets for morning rounds at approx. 6:30 AM and after rounds disperse to the operating rooms, clinic, and inpatient ward. Students will have input to their assignments which will be adjusted by the senior resident on a daily basis on weekdays. They perform preoperative evaluation, intraoperative care, and postoperative follow-up of surgical and nonoperative patients with an assigned preceptor (a resident or attending). Emphasis is on active participation in all aspects of patient care, including procedural skills.

Didactic Activities

Students are expected to read about and discuss the learning objectives with the faculty during the clinical day. In addition, students participate in 2 weekly divisional conferences on Tuesday (selected HPB topics) and Friday (Indications Conference) both at 7:00 AM. Students are encouraged to do at least one full day per week in the various clinics with preparation the day before. Discuss with a faculty preceptor the last day of the clerkship. Students are expected to attend Surgery Grand Rounds (7:00 - 8:00 a.m. Thursdays).

Required Reading

In addition to assigned journal articles, students are expected to read Chapters in Schwartz's Principles of Surgery:

- Minimally Invasive Surgery, Robotics, and Natural Office Transluminal Endoscopic Surgery
- Gallbladder and the Extrahepatic Biliary System
- Abdominal Wall, Omentum, Mesentery, and Retroperitoneum
- Soft Tissue Sarcomas
- Inguinal Hernias
- Ethics, Palliative Care, and Care at the End of Life

Student Evaluations

Students should debrief with course director or designee at the end of the rotation regarding learning objectives. Evaluation will be a composite of Attending's and Resident's input.
**Course Information**

Contact Person
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu

Class Year Name
Colorectal Surgery

Class Code
SUR679

Elective Tags
Inpatient Service, Patient Care, Teaching

Block Length
2 or 4 weeks

Students
1

Prerequisites
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
Julie K. Burkhart will notify the medical student where and what time to report.

What time should students report?
See above!

Who should they report to?
See above!

**Goal**

The goal of the colorectal clerkship is to develop an understanding of and be able to develop a diagnostic and therapeutic plan for a number of colorectal surgical diseases such as diverticulitis, colon cancer, hemorrhoidal disease, and anorectal sepsis.

**Learning Objectives**

1. Develop patient management plans with senior/attending guidance.
2. Perform simple procedures under supervision such as subcuticular skin closure, cyst excision and incision and drainage of perianal abscesses.
3. Assist competently in operative procedures. The student will occasionally function as a first assist to the attending physician or senior resident.
4. Develop a practice of safe handling of instruments and tissues
5. Increase knowledge in all areas of the general surgery curriculum including but not limited to: colon and rectal disease, surgical ICU care and common gastrointestinal malignancies.
6. Develop the skill to tailor laboratory tests appropriately for the targeted disease.
7. Discuss basic laboratory evaluation of the surgical patients.
**Schedule of Activities**

The student is expected to attend and participate in daily morning rounds with the team.

The student will be assigned to cover cases in the OR either at Strong or Sawgrass Surgical Center.

The student is expected to attend at least one clinic day a week. During this time the student will workup patients independently and present to an attending.

**Didactic Activities**

Attend the formal lecture series.

Attend the departmental didactic sessions.

Be responsible for one presentation about a topic of his/her choice addressing one problem with a literature review and critique.

**Required Reading**

Disease of colon and rectum chapter in Schwartz principles of surgery- available on line at Miner library.

Articles for journal clubs will be emailed to the group.

**Student Evaluations**

The student will be evaluated based on the domain of competencies of patient care, medical knowledge and professionalism.
SUR680 Highland Hospital Surgery

**Course Information**

Contact Person
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu
Class Year Name
Highland Hospital Surgery
Class Code
SUR680
Elective Tags
Inpatient Service, Patient Care, Teaching
Block Length
2 weeks
Students
2
Prerequisites
SUR300 Surgery Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Julie K. Burkhart will notify the medical students where and what time to report.
What time should students report?
See above!
Who should they report to?
See above!

**Goal**

Develop expertise in morbid obesity, complications of morbid obesity, and surgical correction of morbid obesity.

**Learning Objectives**

1. Define morbid obesity.

2. Understand the comorbid conditions of obesity, including diabetes, hypertension, sleep apnea, and osteoarthritis.

3. Learn how different bariatric procedures work.

4. Learn about the complications of morbid obesity surgery.

**Schedule of Activities**

1. Round on team with residents and physical assistants.

2. Assist at surgery.

3. Attend clinic.
4. Attend monthly seminar concerning morbid obesity surgeries.

**Didactic Activities**

Tuesday morning (7-8) Surgery Conference, including M&M

Monthly 2 hour patient seminar on morbid obesity

**Required Reading**

Standard surgical textbook on Morbid Obesity
Course Information

Contact Person
Julie K. Burkhart 273-1712 julie_burkhart@urmc.rochester.edu

Class Year Name
Acute Care/Trauma Surgery

Class Code
SUR681

Elective Tags
Inpatient Service, Patient Care, Teaching

Block Length
2 or 4 weeks

Students
1

Prerequisites
SUR300 Surgery Clerkship

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
3rd Year, 4th Year, Visiting

Where should students report?
All visiting medical students need to get approved through Julie K. Burkhart. Julie K. Burkhart will notify the medical student where and what time to report.

What time should students report?
See above!!

Who should they report to?
See above!!

Goal

The work life of a modern trauma/acute care surgeon is multifaceted and includes trauma care, critical care medicine, and emergency general surgery. A rotation on the trauma/acute care surgery service would expose the student to the surgical aspect of a trauma surgeon’s work. The student should become familiar with the Advance Trauma Life Support (ATLS) resuscitation algorithm for the acutely injured patient. He/She should also understand the broad goals of a trauma laparotomy as well as the multidisciplinary care involved in the comprehensive management of the trauma patient. He/She will gain understanding of the priorities in trauma care and the role of subspecialty services such as orthopedic surgery and neurosurgery in the treatment of the acutely injured. Additionally, the student will be exposed to many common emergency general surgical diseases and gain an understanding of their work up and operative management.

Learning Objectives

1. Display an understanding of the principles of ATLS

2. Exhibit an understanding of the pathophysiology of peritonitis and the acute abdomen.
   a.) Exhibit an understanding of the pathophysiology of appendicitis.
   b.) Exhibit an understanding of the pathophysiology of acute gallbladder disease
   c.) Exhibit an understanding of the management of peritonitis
3. Develop an in-depth understanding of fundamentals of basic science as they apply to patients with acute surgical problems. Examples include the pathophysiology of peritonitis, etiology of abscess formation, management of fluid and electrolyte balance in the emergency patient, and surgical anatomy and surgical pathology of trauma and acute care patients.

4. Identify different forms of shock associated with the injured patient, including hemorrhagic, neurogenic, cardiogenic and septic shock, as well as understand classes of hemorrhagic shock.

5. Assist with resuscitation in trauma patients presenting to the emergency department. Assist the trauma team with various tasks during trauma resuscitation.

6. With supervision of the resident and advance practitioner team, assume responsibility for care of a small number of patients on the hospital ward, including initial assessment, creating a therapeutic plan, evaluation of daily progress, and initial assessment of new problems.

7. With supervision of the resident and advance practitioner team, assist in the discharging of patients, including writing the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

8. First or second assist in the operating rooms. Gain basic surgical skills such as knot tying, skin closures, drain placement and removal, etc.

9. Recognize own limitations and know when to call for help.

**Schedule of Activities**

The student will follow the work schedule of one of three trauma teams in order to be fully incorporated into the daily routine of the trauma service. This schedule requires a week of day shifts and two weeks of alternating night call. As the weekend days tend to be the busiest and offer the greatest opportunity for clinical exposure, the student will take their days off on Sundays and Mondays. Further details of the schedule can be obtained from the course director.

The student will be asked to give a brief presentation (10min) on an acute care surgical topic of his/her choice during the last week of the rotation.

**Didactic Activities**

1.) Daily morning report rounds on new patients from previous 24 hours with discussions on work up and treatment decisions (7AM except Thursday at 10:30AM)

2.) Weekly divisional M&M (Tuesdays 8:30AM)

3.) Weekly department resident educational conference (Thursday 7AM-10AM)

4.) Monthly journal club (Wednesday 5PM)

5.) Monthly AAST grand rounds (Wednesdays 5PM)

**Required Reading**

1.) Essentials of General Surgery (Lawrence) – Chapters 5, 9, 11, 14, 16

2.) Acute Care Surgery: Principles and Practice (Britt)– Chapters 1, 3, 4, 11, 12, 28, 30, 31, 35

3.) ATLS Student Manual (for reference)
**SUREX2 Adult Cardiac Surgery - Externship**

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**Course Information**

Contact Person
Julie Burkhart (Julie_Burkhart@urmc.rochester.edu) (585) 273-1712
Rachel Zapata-Bermudez (Rachel_Zapata-Bermudez@urmc.rochester.edu)

Class Year Name
Adult Cardiac Surgery - Externship

Class Code
SUREX2

Block Length
4 weeks

Students
1

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, Visiting

Where should students report?
Contact Julie Burkhart for reporting instructions.

What time should students report?

Who should they report to?

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**Goal**

This is a four-week (4) externship that offers a student clinical experience on the Adult Cardiac Surgery service at the University of Rochester - Strong Memorial Hospital. The student will participate in the preoperative, intra-operative and postoperative care of a variety of patients suffering from acquired cardiac diseases, including but not limited to coronary artery disease, valvular disease, arrhythmia surgery, and end-stage ventricular failure. The student will be required to grasp anatomic concepts that will be reviewed from preoperative studies and available for intra-operative interpretation. The student will have significant exposure with the Integrated Cardiothoracic Surgery residents and will be integral members of the team. Students will be involved in the management of patients to promote a better understanding of the physiology involved. They will be exposed to a variety of clinical environments including the Clinic, CVICU, Cardiac Floor, and Cardiac Operating Rooms. Students are expected to participate in one 1/2 day session of clinic per week and will perform a complete history and physical examination on two patients. Weekly Thursday morning didactic sessions will be run by the Cardiothoracic Surgery residents and one of the Adult Cardiac Surgery attendings. Students will be exposed to advance heart failure procedures including but not limited to Impella, ECMO, RVAD, LVAD, Total Artificial Heart, and Heart Transplantation.

Strong Memorial Hospital is Upstate New York’s only Heart Transplant Center and has performed over 240 Heart Transplant to date. In 2018, the University of Rochester was one of the busiest heart failure programs in the country and one of the highest implanters of HeartMate 3 left ventricular assist devices.

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**Learning Objectives**

**Clerkship Objectives**

1. Diagnosis and management of patients with acquired disease of the heart, including coronary artery disease, valvular diseases, arrhythmias, aortic disease, and end stage ventricular failure.
2. Become familiar with mediastinal and cardiac anatomy and participate regularly in the operating room.

3. Become familiar with the cardiac pathophysiology in peri-operative patients.

4. Develop strong surgical skills while assisting in opening and closing sternal and thoracotomy incisions.

5. Be involved in the management of patients transferred from the postoperative period including participating in ICU and floor rounds.

6. Become familiar with the evaluation and use of cardiac diagnostic studies, including echocardiograms, cardiac MRI and cardiac catheterization.

7. Become exposed to minimally invasive cardiac surgery, including sternal sparing aortic valve, mitral valve, aortic root, Bentall, TAVR, and LVAD implantation.

**Schedule of Activities**

Students will be expected to work every weekday and two of the four weekends. Students are not scheduled to be on-call, but are encouraged to attend emergent cases as they become available.

80% - Inpatient care

10% - Clinical Rounds/Clinic

10% - Conferences/Lectures

**Didactic Activities**

Conferences, Rounds, History/Physical Exam, Clinic, Interpretation of Lab Results, Observe Procedures, Perform Procedures with Direct Supervision
SUREX3 Thoracic & Foregut Surgery - Externship

**Course Information**

**Contact Person**
Julie Burkhart (julie_burkhart@urmc.rochester.edu) (585) 273-1712
Rachel Zapata-Bermudez (rachel_zapata-bermudez@urmc.rochester.edu)

**Class Year Name**
Thoracic & Foregut Surgery - Externship

**Class Code**
SUREX3

**Block Length**
4 Weeks

**Students**
1

An elective experience is sometimes “split” by these weeks. Is it okay to split?

No

Available to the following medical students:
4th Year, Visiting

Where should students report?
Contact Julie Burkhart for reporting instructions.

What time should students report?

Who should they report to?

**Goal**

This is a four-week (4) externship that offers students clinical experience on the Thoracic & Foregut Surgery service at the University of Rochester - Strong Memorial Hospital. The Division of Thoracic & Foregut Surgery at URMC is one of the busiest Thoracic Surgery services in the country. Students will be exposed to a breadth of patients with general thoracic surgical diseases of the chest including pulmonary and esophageal cancers, chest wall tumors, benign esophageal disease, pulmonary insufficiency, diaphragmatic hernias, and abnormalities of the airway. They will become familiar with the anatomy of the chest including the heart, great vessels, lung, esophagus, mediastinum, chest wall and diaphragm. Students will become familiar with the pathophysiology and management of achalasia, gastroesophageal reflux disease, and paraesophageal hernias. They will participate in the preoperative, intra-operative, and postoperative care of the patients. They will participate in the operations used to treat these conditions including esophageal and pulmonary resections (esophagectomy, lung wedge resections, anatomic segmentectomy, lobectomy, and pneumonectomy), anti-reflux surgery (Dor, Toupet, and Nissen Fundoplication), esophagomyotomy, chest wall resection and reconstruction, thoracoscopic and robotic approaches to thoracic surgery, and endoscopic esophageal and airway interventions including stents, dilatation, and laser therapy. Focus will include minimally invasive laparoscopic, thoracoscopic, and robotic approaches to these complex operations. Students will get broad exposure to diagnostic bronchoscopy, EBUS, esophagoscopy, manometry, and Bravo pH testing in our state of the art Esophageal Lab. Students will be expected to participate in the operating rooms, the inpatient care unit, and the clinic. They will assist in skin suturing, chest tube insertion, and surgical knot-tying. Students will be expected to function as a member of the inpatient team and will have significant exposure to the Integrated Cardiothoracic Surgery residents. They will have the opportunity to see consults and staff patients with attendings. Students will be expected to make one 30 minute presentation to the faculty and staff on a thoracic surgery topic which will be determined in collaboration with one of the faculty mentors. Students will participate in clinic one day per week and will have the opportunity to see patients in the Wilmot Cancer Center and participate in weekly thoracic conferences including indications, tumor board, and resident teaching.
Learning Objectives

Clerkship Objectives

1. Diagnosis and management of patients with benign and malignant pulmonary and esophageal disease, chest wall tumors, airway abnormalities.

2. Become familiar with mediastinal, thoracic, and esophageal anatomy and participate regularly in the operating room.

3. Become familiar with the thoracic pathophysiology in peri-operative patients.

4. Develop strong surgical skills while assisting in opening and closing laparoscopic and thoracoscopic incisions.

5. Be involved in the management of patients transferred from the postoperative period including participating in ICU and floor rounds.

6. Become familiar with the evaluation and use of thoracic and esophageal diagnostic studies, including barium swallow, esophagoscopy, Bravo pH, manometry, PFT, and CT/PET.

7. Become exposed to minimally invasive thoracic surgery, including VATS/Robotic lobectomy, thymectomy, esophagectomy, Nissen fundoplication, and Heller myotomy.

Schedule of Activities

Students will be expected to work every weekday and two of the four weekends. Students are not scheduled to be on-call, but are encouraged to attend emergent cases as they become available.

80% - Inpatient care

10%  - Clinical Rounds/Clinic

10% - Conferences/Lectures

Didactic Activities

Conferences, Rounds, History/Physical Exam, Clinic, Interpretation of Lab Results, Observe Procedures, Perform Procedures with Direct Supervision
SUREXT Surgery Sub-Internship

Course Information

Course Director
Nicole A. Stassen M.D.
Contact Person
Julie Burkhart 273-1712 julie_burkhart@urmc.rochester.edu
Class Year Name
Surgery Sub-Internship
Class Code
SUREXT
Block Length
4 week Sub-I
Students
4
Prerequisites
SUR300 Surgery Clerkship
An elective experience is sometimes "split" by these weeks. Is it okay to split?
No
Available to the following medical students:
3rd Year, 4th Year
Where should students report?
Please contact Julie K. Burkhart before scheduling a visiting medical student at 273-1712. All students will be given information prior to their start date on where they will be reporting.
What time should students report?
See above!
Who should they report to?
See above!

Goal

Fourth-year medical students are required to participate in a sub-internship of at least four weeks' duration. The goals of this rotation are to allow medical students who have completed their third year clinical surgical rotation a hands on, in-depth experiences in which they can function at the level of a surgical intern. The sub-internship is designed to be a broadly based experience, which allows students to assume primary responsibility for and involvement in the care of surgical patients across the duration of the healthcare encounter. The sub-internship requirements can be satisfied by a rotation on the general inpatient surgical service or a surgical sub-specialty service. The requirement cannot be fulfilled by rotating through a service that only provides consultative care.

Each sub-internship has defined pre-requisites courses, which will usually include the core third year clinical clerkship. This limits the earliest that a medical student could fulfill the sub-internship requirement to June of their fourth year. Sub-interns will work under the direct supervision of residents and faculty preceptors. A mentor will be assigned to you, who will guide and assist you with your service related responsibilities. You will work closely with the fellows, chief residents, interns and physician extenders on the surgical service. Taking call is not an option and you should expect to be “on call” 1-2 days/week. This will closely resemble the experience of a surgical intern.
The curriculum for sub-interns varies amongst the surgical services, but typically is at an advanced level compared to the third year surgical clerkship rotation. A course outline will be provided to you on the first day of your rotation. Students are expected to fulfill the sub-internship requirement at a University of Rochester teaching hospital.

**Learning Objectives**

At the completion of the rotation, the sub-intern is expected to be able to organize data (laboratory, radiologic & pathologic) in a concise and coherent manner. The individual should be able to perform an efficient and thorough history and physical examination. Based on the findings of the history and physical exam, the sub-intern should be able to define and initiate an appropriate care plan. They should be comfortable with the preparation of a patient for surgery and the routine management of post-operative care. During the rotation the sub-intern should expect to perform (under direct supervision) suturing of incisions, suture and drain removal, abscess drainage and dressing changes. Competency based evaluations will offer an excellent basis on which to assess the medical student's progress.

I. Patient Care

- Be reliable, keep track of all clinical events and participate on daily rounds, be primarily responsible for 23 patients at a time
- Work closely with interns, residents and fellows
- Perform detailed and thorough history and physical examinations
- Devise patient care plans and participate in decision making process for patients
- Learn to write medically appropriate, errorfree orders
- Maintain thorough and legible medical records

II. Medical Knowledge

- Develop a general knowledge of fundamental clinical principles and decision making process of basic surgical problems
- Learn relevant anatomy & physiology to aid in patient care
- Understand the fundamentals of evaluating surgical risk in both elective and emergent settings
- Analyze available data relevant to your patient care
- Read about each surgical problem you encounter and be prepared to discuss this with your preceptor

III. Practice-based Learning

- Learn basic laboratory evaluation of emergent and elective patients
- Understand basic indications for various radiologic studies
- Reinforce basic concepts of tissue handling, suturing techniques and operating room procedures
- Use instruments appropriately
- While scrubbed in the operating room, learn various exposure techniques, and become facile with suctioning, cutting and retraction techniques
- Participate in daily rounds and all service related conferences
- Plan to attend an outpatient clinic 1 day/week with a designated faulty member

**IV. Professionalism**

- Be responsible and dependable
- Understand the importance of honesty in the doctor-patient relationship
- Learn about ethical issues such as informed consent and end of life issues
- Learn how to participate in discussions and becomes an effective part of the surgical team
- Maintain a presentable appearance that sets the standard for others

**V. Systems-Based Practice**

- Pay attention to and learn from the assessment of patient care as discussed during rounds and the weekly M&M conferences
- Be introduced to outcomes analysis, quality improvement and cost-benefit considerations of patient care
- Begin to practice evidence-based medicine through the use of practice guidelines and clinical pathways

**VI. Research**

- Develop a basic understanding of and participate in the evaluation of surgical literature for credibility and applicability

**Schedule of Activities**

Surgical Grand Rounds at SMH – Thursday morning at 7 am (Upper S wing Auditorium)

Resident Case Presentation Conference – Thursday morning at SMH at 8 am Upper S wing Auditorium

Resident Basic Science Conference - Thursday morning at SMH at 9 am Upper S wing Auditorium
**Course Information**

Course Director  
Thomas Patrick Frye D.O.  
Contact Person  
Stephany Greenough, 273-1904 stephany_greenough@urmc.rochester.edu  
Class Year Name  
Surgical Specialties: Urology Clerkship  
Class Code  
URO604  
Elective Tags  
Inpatient Service  
Block Length  
1-2 weeks  
Students  
1  
An elective experience is sometimes "split" by these weeks. Is it okay to split?  
No  
Available to the following medical students:  
2nd Year, 3rd Year, 4th Year, International Visiting, Visiting  
Where should students report?  
James P. Wilmot Cancer Center, 5th floor (WCC5)  
What time should students report?  
6:30 a.m.  
Who should they report to?  
Urology Chief Resident

**Goal**

This course is offered to students to build upon the basic urology learning accomplished in the second year Primary Care Clerkship. This course is designed to prepare students to evaluate and manage urologic disorders at a primary care level and to recognize those problems which need further specialty consultation. During this elective, the student is attached to the urology resident team, working side by side with faculty and residents, rounding on inpatients, going to the operating room, emergency room and hospital consults, going to clinic with a urology attending physician and attending departmental conferences.

**Learning Objectives**

By the end of the rotation the student should be able to:

1- History skills -obtain an accurate history from patients with a urologic complaint  
2) Physical examination skills - perform a focused urologic examination on patients  
3) Demonstrate knowledge of the basic urologic laboratory exams, urine analysis, PSA, renal function tests, imaging studies, endoscopy, extracorporeal shockwave lithotripsy (ESWL), urodynamics  
4) Demonstrate an understanding of assignments and common urologic problems including renal, bladder, prostate cancer; kidney stones; urinary incontinence; significance of hematuria; male erectile dysfunction/infertility; UTI's; intrascrotal lesions and how to differentiate between them  
5) Formulate an appropriate differential diagnosis  
6) Professionalism - demonstrate professional responsibility as a working team member with faculty, residents, patients and families
**Schedule of Activities**

Each student is given a schedule including approximately 8 hours of faculty-supervised evaluation, examination and treatment of patients in the ambulatory setting. In addition, there are weekly didactic activities. There are multiple opportunities to participate in the operating room, including ESWL stone treatment. The typical hours are Monday through Friday, 6:00 a.m. - 6:00 p.m. The home base for all student activity is the urology inpatient team.

**Didactic Activities**

Students are expected to participate in weekly departmental conferences including Grand Rounds, Journal Club, Indications, QA and lectures given by faculty and visiting guests.

**Required Reading**

Students are required to read select topics in the Medical Student Curriculum (core content) found on the AUA website.

**Student Evaluations**

Final grading is done by the program director and is based on evaluations by residents and preceptors. The student is required to complete a Reflection Paper which documents an experience during the course (e.g., clinic, operating room, patient floor, and/or faculty/resident/patient interactions).
Course Information

Course Director
Hani H. Rashid M.D.
Contact Person
Course Coordinator: Stephany Greenough (585) 273-1904

Class Year Name
Urology Sub-Internship
Class Code
UROEXT
Block Length
4 weeks
Students
2

An elective experience is sometimes "split" by these weeks. Is it okay to split?
No

Available to the following medical students:
4th Year, Visiting

Where should students report?
James P. Wilmot Cancer Center, 5th floor (WCC5)

What time should students report?
6:30 a.m.

Who should they report to?
Chief Residents

Goal

The goal of the Urology Sub-Internship is to allow the student to function in the capacity of an intern under the close supervision of residents and attending physicians. This includes inpatient, operating room, and daily rounding responsibilities. Students have exposure to the various sub-specialities within urology, including oncology, endourology, stone disease, female urology, pediatric urology, infertility, reconstruction and minimally invasive urology. The full spectrum of adult and pediatric urologic disease is managed from medical and surgical approaches. The 4-week experience generally consists of one week each in pediatric urology and oncology; the other 2 weeks are arranged based on the student's choice and area of interest. Students admit new patients and may also assume the care of those admitted by other attending physicians. They will have primary responsibility under supervision for a panel of inpatients. The average census for urology inpatients is 16, and up to 26. The student is assigned a faculty mentor to help guide them through a successful rotation.

Learning Objectives

Objectives: By the end of the rotation, the student is expected to:

1. Obtain an accurate history from assigned patients with a urologic complaint.
2. Perform a general physical exam and focused urologic exam on their patients.
3. Identify and order appropriate diagnostic laboratory and imaging studies for the clinical problem at hand after formulating a differential diagnosis
4. Propose medical or surgical management for their panel of patients.
5. Manage a panel of patients according to team/faculty decisions.

6. Prepare and deliver a 30 minute presentation related to clinical material and experiences encountered during this experience, and related research.

7. Be able to perform the following bedside or operating room procedures under supervision:
   - Simple and difficult Foley catheter placement
   - Bladder irrigation
   - Bedside drain removal
   - Basic wound care
   - Wound closure; simple, running, mattress, subcuticular as indicated
   - Assistance with open and endoscopic cases

Schedule of Activities

Activities:

Students actively participate with selected faculty members and resident staff on the inpatient service and in the operating room. Attending and house staff supervision and teaching are parts of all aspects of the rotation, and there is the expectation of complete integration into the resident team. Students are required to participate in the following activities during this urology Sub-Internship:

1. Assume responsibility for the care of a panel of four patients on average within resident team as determined by the Chief Resident.

2. Participate in an active manner in daily patient rounds with the resident team.

3. Participate in the operating room as assigned by the Chief Resident.

4. Participate in faculty clinic one half day per week per precepting faculty member’s clinic schedule.

5. Take call alongside the on-call resident on a schedule jointly determined.

6. Attend the weekly scheduled teaching sessions including Grand Rounds, Journal Club, Professor Rounds, Quality Assurance/Improvement, Indications and any other conferences given by staff and/or visiting professors.

7. Prepare a well-researched 30 minute presentation to be given during departmental conference time. This can be a presentation of an interesting case, a topic of interest, or a research project.

8. Maintain a tracking log for procedures performed.

Required Reading

Students are required to become members of the American Urological Association if they aren’t already. Membership is free and the department assists as needed. Membership is required because it allows full Web access to the AUAniversity – the American Urologic Association’s educational offerings for urologists, residents and all medical students, including written content, videos, podcasts, etc. It is the primary educational resource for the Sub-Internship.

The AUAniversity/Medical Student Education are the main educational resources for students and residents in urology. Students are encouraged to use this website as the main learning resource, in addition to Hinman’s Atlas of Urologic Surgery. Please see the Program Coordinator for a copy of the book. There are many other fine learning aids, which can be discussed with the residents and faculty. Most are available for use in the Resident Room of the Department.
Student Evaluations

Grading:

1. Per standard grade reporting for electives.
2. Attendance is mandatory. Exceptions must be discussed with the Program Director.
3. Completion of a 5 question essay assignment, which will be given to the student at the start of their rotation, for completion by the end of the rotation.
4. Performance evaluations based on the 6 ACGME Competencies: patient care, medical knowledge, professionalism, interpersonal and communication skills, practice-based learning (searching for best evidence; self-education); systems-based practice (working with staff, other services, other settings) as well as the student’s Grand Rounds presentation. Evaluations will be confidential and will be obtained from residents, faculty, nursing, other staff as indicated.
5. Review of procedure log